

**VERB MORPHOLOGY IN GĪKŪYŪ IN THE  
LIGHT OF MORPHO-SYNTACTIC THEORIES**

**BY**

**PHYLLIS W. MWANGI**

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## DECLARATION

I declare that, to the best of my knowledge, this thesis contains no material previously presented for the award of a degree or diploma in any university. This work is therefore original except where due citation has been made.

Phyllis W. Mwangi

PHYLLIS W. MWANGI

THIS THESIS HAS BEEN SUBMITTED WITH OUR APPROVAL AS UNIVERSITY SUPERVISORS

Angelina N. Kioko

Dr. ANGELINA N. KIOKO

Department of English and Linguistics.

Kenyatta University

Tom Onditi

Dr. TOM ONDITI

Department of English and Linguistics.

Kenyatta University

KENYATTA UNIVERSITY LIBRARY

(iii)

## DEDICATION

This work is dedicated to the memory of my dear mother, Miriam Wangeci Mwangi.

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**DEFINITION OF TERMS**

(Except where otherwise indicated, the definitions below are taken from Culicover, 1997)

Argument	An individual or entity (participant) involved in some relationship denoted by a verb or adjective. (Katamba, 1993: 256)
External argument	A VP- external participant selected by the verb
Internal argument	A VP-internal participant selected by the verb
Argument structure	The set of arguments selected by the verb including the subject.
Case	Marking that indicates the grammatical function of an argument
Case assignment	Assignment of a case feature to an argument
Expletive	An element that has a syntactic category and a grammatical function but no independent meaning
Grammatical function changing operations	Valency-changing operations (Spencer, 1991: 297)
Theta role	Syntactic representation of the semantic role of an argument
External theta role	Role assigned to the subject
Internal theta role	Role assigned to an argument within the VP.

**ABBREVIATIONS**

arg	agreement
app	applicative
asp	aspect
assoc	associative
expl	expletive
foc	focus
fv	final vowel
GFC	grammatical function changing
imperf	imperfect
log sub	logical subject
neg	negator
obj	object
OBJ	syntactic object position
om	object marker
op	object prefix
pas	passive
perf	perfect
rec	reciprocal
refl	reflexive

rev	reversative
stat	stative
sub	subject
SUB	syntactic subject position
tns	tense
tran	transitive

## ABSTRACT

Among the many controversies in linguistics today, there are two that have captured our interest. The first and the main one involves the status of morphology and its relationship with other components of grammar like syntax, phonology and semantics.

Some linguists believe morphology can adequately be catered for in these other components and therefore does not need a separate component in language. Others however feel that there are issues that are morphology-specific worth studying.

The second controversy addressed in this work involves the distinction normally drawn between inflection and derivation. There are those who believe that the dividing line between the two is rather fuzzy and not really meaningful. The opposing camp, however, thinks that the two are distinct.

Our research was prompted by these two debates. In addressing the first one, we have looked at morphological and syntactic implications of four valency-changing morphemes in Gikūyū, namely: the applicative, the causative, the passive and the stative. We have sought to explain the syntactic effects of the affixation of these morphemes within the Merger Theory (Marantz, 1984) and the Incorporation Theory (Baker, 1988a,b), both of which are syntactic in orientation.

As a preliminary to the above task however, this research addresses the distinction drawn between inflection and derivation in Gikūyū. We have employed four distinguishing criteria on the four morphemes in order to determine to what extent each exhibits features associated with inflection on the one hand and derivation on the other.

In relation to the first research issue, we have found that the syntactic theories of Merger (Marantz, 1984) and Incorporation (Baker, 1988a,b) cannot adequately account for the morpho-syntactic behaviour of valency-altering morphemes in Gikūyū. We have explained what the shortcomings of the theories are, and where possible, suggested alternative analysis. Finally, we have concluded that although morphology interacts closely with other components of language, it retains a distinct place in the study of language. We have recommended that further research is necessary in this area, especially geared towards a lexical- functional approach given the rich and complex morphology evident in Gikūyū and in Bantu languages generally.

Concerning the distinction between inflection and derivation, our analysis has shown that the four distinguishing criteria do not give conclusive results, thus making it difficult for us to classify the morphemes as either inflectional or derivational. In view of this, we have reformulated the distinguishing criteria to suit Gikūyū after arguing that the distinction is necessary especially for lexicographical purposes.

## CHAPTER 1

### 1.0 A BRIEF HISTORICAL BACKGROUND TO THE STUDY

Morphology offers many puzzles to the present-day student of language. One unresolved issue is its status as a branch of linguistics. By definition, morphology deals with 'the forms of words in different uses and constructions' (Marchand, 1969). Although interest in morphology has probably always gone hand in hand with interest in language in general, morphology has lagged behind when compared to syntax and phonology. One reason for this is that it is connected with the non-linguistic world of things and ideas for which words provide the names (Adams, 1973). Another reason for this lack of advancement is that the emphasis of linguistic study in the early 20th century tended to be on the distinction drawn between synchrony and diachrony by Saussure in 1916. Most linguists studied morphology either exclusively synchronically or diachronically. Among the former is Bloomfield (1935) while Koziol (1937) is an example of the latter. Since the most useful and fruitful approach would be a synthesis of the two, morphology did not receive much boost from these exclusive approaches.

In the 1940's and 1950's, phonology and morphology were the mainstay of American Structuralists. The word as a theoretical entity did not interest them much because they dealt with units smaller than the word. They isolated minimal segments of speech and described their distribution in relation to one another as well as their organization into larger units (Bauer, 1983).

The Chomskyan Revolution that began in 1957 saw the genesis of the Transformational Generative Grammar (T.G.G) but did not favour morphology either. T.G.G was interested in units larger than the word. It looked at the structure of sentences and phrases. Sentences were

seen as being composed of morphemes and not words. Even when Lees (1960), operating within the T.G.G., looked at the generation of words by word-formation, he treated the words as a special kind of embedded sentence. He did not go into problems peculiar to morphology. Morphology in general and derivational morphology in particular, gained currency within the T.G.G. framework with the publication of Chomsky (1970), "Remarks on Nominalizations", which drew a dichotomy between the lexicalist and transformationalist approaches. Other related works sprang up at about this time. They include: Gleitman and Gleitman (1970) and Lees (1970). The early 1970s also saw morphology studied in its own right and outside the T.G.G. for the first time since the transformationalist bang. Adams (1973) and Pennanen (1972) were among the scholars who did this.

In the eighties several linguists tried to explain issues in morphology from a new syntactic point of view. This was due to the realization that morphological changes have significant syntactic consequences. Notable among these linguists is Chomsky (1981) who came up with the Government and Binding Theory. Others who followed and improved upon this theory are Marantz (1984), Baker (1988a,b) and Chomsky (1991). They have applied their theories on natural languages, Bantu ones included.

At present, there is still considerable debate on the nature of morphological operations and how they should be dealt with in the grammar of a language.

### **1.1.0 INTRODUCTION TO THE STUDY**

Now that morphology has attracted considerable attention as an area of study, it is not surprising that certain issues previously taken for granted have risen to the fore thereby

generating considerable debate. One such issue regards the place of morphology in the grammar of a language. Opinion is divided between recognizing it as a legitimate component and subsuming it under the other areas such as syntax, phonology and semantics.

In this connection, our study highlights the relationship between morphology and syntax in Gikũyũ by analysing some Gikũyũ data using two syntactic theories that have been used in other Bantu and European languages. These theories reveal how and to what extent morphology interfaces with syntax in Gikũyũ. Our use of raw data is in line with the goal that any linguistic theory seeks to achieve, namely: to understand and to portray how the human mind processes language (Chomsky, 1965).

Before launching into the study of the above problem, we have addressed another vexing question. This concerns the division of morphology into inflection and derivation, an issue that is actually twin to that of separating morphology from syntax as will be evident from the literature review. There are linguists who feel that the dividing line between the two is rather tenuous and insignificant. Conversely, others feel that inflectional morphemes are clearly distinct from derivational ones. We have applied a set of criteria used in distinguishing the two in order to determine this issue in Gikũyũ.

### **1.1.1 BRIEF INTRODUCTION TO THE GIKŪYŪ LANGUAGE**

Gikũyũ is a Bantu language that falls under the Niger-Congo sub-family of languages. According to Guthrie (1967) it falls in zone E, group 50, and is language number 51. It has an estimated 5.3 million speakers according to the provisional 1999 census (2000, March 1, Daily Nation). Its speakers are mainly located in the Central Province of Kenya but a sizeable number

is also found in the Rift Valley.

## 1.2 STATEMENT OF THE PROBLEM

As mentioned in the introduction, this research has sought to examine how morphology interacts with syntax in the grammar of Gikūyū. There has been much debate concerning the status of morphology as is evident in the literature review. Some of the questions arising from this debate are: "Are there issues that are uniquely morphological that cannot be handled in the other components of language, especially in syntax?" In other words, "Can syntactic theories, for example, adequately capture and account for grammatical function changing phenomena without taking recourse to morphological explanations?"

In view of the above, we have investigated the morphological and syntactic implications of four grammatical function changing morphemes (henceforth GFCs) in Gikūyū, namely: the passive, the causative, the stative and the applicative. To be able to do this, we have employed two syntactic theories as tools of analysis. These are:

- (1) The Merger Theory of Marantz (1984).
- (2) The Incorporation Theory of Baker (1988a, b).

We have also concerned ourselves with the adequacy or otherwise of these theories in handling the said Gikūyū phenomena.

From the onset, we noted that the four GFC processes investigated in this study are brought about by the affixation of morphemes which fall under what has been classified as derivational morphology. Since there is a raging debate concerning the division of morphology into inflection and derivation, we decided to investigate this issue in Gikūyū as a preliminary to

the study of the problem highlighted above. In some studies, (Anderson, 1988; Lieber, 1992 and Williams, 1987) inflection and derivation are normally seen as being mutually exclusive with the former falling under syntax and the latter under lexis or morphology in a narrow sense. The implication is that if there is a dichotomy between syntax and morphology, then it is a corollary to that between inflection and derivation. It is in the light of this that we asked ourselves, "Are derivational processes fundamentally different from inflectional ones in Gikūyū or are there any 'gray' areas?" Using the four morphemes mentioned above, we have sought to answer this question.

### 1.3 RESEARCH OBJECTIVES

The aims of this study were:

1. To examine the extent to which the selected morphemes have features associated with derivation or inflection.
2. To apply the claims of the selected theories in handling morpho-syntactic aspects of GFC processes in Gikūyū.
3. To propose, where possible, alternative analysis of the data in Gikūyū by suggesting some extensions to the theories where they are found wanting.

### 1.4 ASSUMPTIONS OF THE STUDY

The study begins by making the following assumptions:

1. That when applied to Gikūyū data, some of the criteria for distinguishing between

inflectional and derivational affixes may yield results that are contrary to expectation.

2. That the syntactic theories advanced to explain GFC processes can be applied to the analysis of morphological phenomena in Gikūyū.
3. That some aspects of Gikūyū GFC processes may not readily render themselves analysable within the two theories.

## 1.5 RATIONALE FOR THE STUDY

Unlike syntax and phonology, morphology has not been studied prolifically as was stated in the historical background in section 1.0. Since morphology deals with words, it has been taken for granted following the argument that it is not necessary to know how a word is constructed in order to understand it. It is for this reason that we feel that our study makes a contribution to the area of morphology and to linguistics in general. In particular, lexicographers could benefit from this study since it deals with productivity (as one distinguishing criterion between inflection and deviation) of affixes which in turn determines which derived words should be given lexical entries and which ones should not.

The data collected forms useful corpora for many areas of language research. Sociolinguistically, the data (both within the text and in the appendices) could be used in a comparative study to determine how similar or otherwise Gikuyu is, to other Bantu languages. Applied Linguistics could also benefit in a research on the acquisition order of structures since the examples used range from the simple to the complex. One could also investigate the kind of errors likely to occur in each of the GFC processes and verb categories discussed in this work.

More importantly, the research has attempted to determine whether there is a clear-cut

distinction between inflection and derivation in Gikũyũ. As Katamba (1993) says, it is an issue worth investigating since much morphological theorizing hinges on the distinction. Our conclusion regarding this distinction has been borne out by critical analysis of the data rather than preconceptions present in literature, as has tended to be the case in previous studies in Gikũyũ. Further still, the study contributes to the vexing debate concerning the status of morphology and its interplay with other areas of the grammar of a language. It also reveals the adequacy or otherwise of the two theories in analysing valency changing phenomena in Gikũyũ.

Finally, it is hoped that future researchers undertaking studies in theoretical linguistics will find this work a relevant reference. It can also serve as a basis for further research in this area. For example, the interaction between morphology and the other components such as phonology and semantics could be investigated. The status of morphemes not discussed here as being inflectional or derivation (according to the criteria adopted here) could also be a further area of research.

## 1.6 SCOPE AND LIMITATION OF THE STUDY

The research focuses on the Gikũyũ language although similar studies on English and other African languages have generally served as a beacon in guiding us on how to go about the study. Although morphology broadly entails two branches, inflection and derivation, our interest lies in what has been called derivation for two reasons. One, 'derivation' has been found to have a large open set of morphemes unlike 'inflection' which consists of a fixed and limited set, a fact which would have rendered sampling difficult. Two, to be able to address the question of the interface between morphology and syntax, it is imperative that we use

morphemes that are analysable from syntactic theoretical approaches. Such morphemes tend to be those that change the argument structure of predicates. Invariably, these morphemes fall under what has been classified as derivation.

To investigate the validity of the dichotomy drawn between inflection and derivation, we have sampled four morphemes namely: 1. the passive, 2. the stative, 3. the applicative and 4. the causative. These four have been chosen by virtue of their being the commonest in Gikūyū according to Leakey (1959). A larger number would have been too wide a scope for a study such as this to handle and the four are representative because two of the morphemes (the passive and the stative) are valency-reducing while the other two (the applicative and the causative) are valency-increasing.

Four major criteria have been employed in making the distinction between inflection and derivation (Bauer 1988). These are:

- (1) Degree of productivity
- (2) Regularity in meaning
- (3) Placement from the root
- (4) ) The effect on the syntax of a given sentence.

Although these are not the only criteria, they have been chosen because of their applicability to the Gikūyū language. The other criteria include:

- (5) Change of word class after the addition of a derivational affix
- (6) The replaceability of derivatives with monomorphemic forms.

The last two (5 and 6) are not applicable to Gikūyū since all GFC morphemes are class-preserving and monomorphemic words are almost non-existent (words in the language consist of roots and other affixes). The first four criteria have been tested on a set of 72 randomly

sampled verbs. The source of our data was the 1963 edition of the Gikūyū Bible and a few texts written in the Gikūyū language such as Gakaara (1963) and current magazines. From these, we have been able to get enough verb- roots for the study.

In addressing the interplay between morphology and syntax, we have employed the theory of morphological merger (Marantz, 1984) and that of incorporation (Baker, 1988a,b) as mentioned in the statement of the problem. Although these are not the only approaches to morphology, they have been picked out primarily because of their import on morphology as it relates to syntax. These theories have been used to analyse four GFC processes namely: passivization, causativization, applicativization and stativization.

#### **1.7.0 THEORETICAL FRAMEWORK**

In this section, we begin by briefly reviewing the two syntactic theories employed in this study, namely the Merger Theory (Marantz,1984) and the Incorporation Theory (Baker,1988a,b) both of which are developments of the Government and Binding Theory (Chomsky,1981). Before embarking on that however, we will provide an overview of two more recent syntactic theories that could have been used but were not with good reasons. These theories are: The Principles and Parameters (Chomsky,1991) and the Minimalist Program (Chomsky,1995).

### 1.7.1 PRINCIPLES AND PARAMETERS (CHOMSKY,1991)

The basic tenet of the Principles and Parameters framework is that much of the knowledge we have about language is innate or in-built in the mind. As a result, every human being is assumed to have the capacity to acquire language. This presupposes a universal mechanism that renders languages more similar than dissimilar underlyingly. For example, in all languages, we have provision for questions/statements, active/passive and affirmatives/negatives. and we can all recognise them as such. These universal factors are referred to as Principles within this theory.

The variations among languages, be they syntactic, lexical, semantic or phonological are considered quite superficial and result from the setting of particular parameters. In a nutshell, while principles capture generalizations among languages, parameters are language-specific.

This is applicable to our work in that we can look at the phenomena dealt with in terms of principles or parameters. Among the principles are: GFC processes, abstract case, D-structure, S-structure, government and theta- role assignment. The manner in which these operate in Gikũyũ as opposed to, say English, is determined by the way the parameters operate. We shall see, for example, that **case** and **theta role** assignment adequately cater for passives in English but they don't explain the full range of passive constructions evident in Gikũyũ.

Theories cast within the Principles and Parameters mould are based on three premises.

These are:

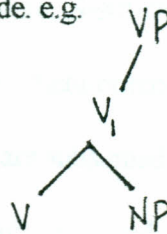
- 1) Syntacticization
- 2) Uniformity
- 3) Configuration

Syntacticization refers to the process of looking at language phenomena from a syntactic perspective. In our study for instance, a morphological process that involves the coming together of two lexical items, one independent and the other affixal, is explained in terms of merger and incorporation both of which have syntactic motivation.

Uniformity on the other hand is the assumption that if two structures share some properties, then they must be similar at some level of analysis. Put concretely, if two structures are formally different but semantically related, then they must have a common underlying structure. The principle of uniformity is therefore structure-preserving.

This is quite in line with the two theories employed in this work. In Merger for example, active and passive sentences have the same pre-merger L-S structure.

Configuration refers to the way syntactic structures are organized. This organization could be vertical hence a dominance relation as instantiated below where a case assignor and assignee are dominated by the same node. e.g.



Here, the assignor (V) and the assignee (NP) are immediately dominated by  $V_1$  and dominated by VP. The arrangement could also be horizontal as in C-command and government relations. These are core notions in both Merger and Incorporation. Another example is feature percolation which is key to the Merger Theory.

From the foregoing, we can see that the theories of Merger and Incorporation converge in Principles and Parameters which is really an umbrella framework for many syntactic theories.

It streamlines them and gives them focus by categorizing their 'building blocks' into principles and parameters. Principles and Parameters is therefore unlikely to significantly address the inadequacies of Merger and Incorporation in relation to Gĩkũyũ GFCs. On the other hand, these two theories have given us the advantage of looking at the phenomena in question from a theory-specific perspective. The fact that they apply their claims to specific Bantu languages makes them all the more suitable for our purposes and we feel that nothing is lost by settling on these earlier theories.

### 1.7.2 THE MINIMALIST PROGRAM (Chomsky,1995)

The Minimalist Program basically constitutes a radical shift from earlier syntactic theories. In essence, the program discards what it views as superfluous steps and stipulations in derivations. These include the notions of D-structure, S-structure and government. Others such the ECP (Empty Category Principle), case filter, theta-criterion, head movement (movement of a lexical category) and the Projection Principle are subsumed under economy conditions.

Economy conditions are formulated to reduce structures and derivations to their barest minimum with the ultimate aim of capturing simplicity and naturalness of the formal systems.

For example, a constituent only moves if the movement is stipulated. Further, such a movement must involve the fewest and shortest steps possible. Chomsky (Ibid) mainly draws his illustrations from auxiliary inversions and the raising of subjects from one argument position (that of complement) to another ( that of specifier) in the passive construction.

The theory accommodates morphological matter by making reference to :

- (a) head-features which show properties such as the number, person, tense and case of a

lexical head.

- (b) complement features which indicate the range of complements required by a lexical item e.g. infinitive clause and determiner phrase(DP).
- (c) Specifier-features which determine the kind of subject, if any, required by a lexical head.

Whether the Minimalist Program has more merit than Merger and Incorporation will not engage us here since the morphological data it deals with is mainly of an inflectional nature, as is evident from the brief discussion above. Since our work focuses on derivational morphemes, the Minimalist Program is unsuitable. Even where the term 'merger' is used within the Minimalist Program, it is with reference to the combination of words into phrases and clauses rather than the co-joining of a base and an affix as in (Marantz, 1984).

### **1.7.3 JUSTIFICATION FOR CHOOSING THE MERGER AND INCORPORATION THEORIES**

We have found the theories of Merger (Marantz, 1984) and Incorporation (Baker, 1988a,b) relevant and appropriate since they address morphological issues in Bantu and are more streamlined than earlier theories such as Government and Binding (GB). Although both are offshoots of GB, they differ in the way they explain GFC phenomena; one does so in terms of case-regulated incorporation and the other in terms of merger in which the categorial features of the root and the affix play a key role. Since syntax has prolifically been studied within various theoretical approaches, we feel justified in looking at it from two theoretical models. As a syntactic theory, Incorporation is more streamlined and

refined especially in terms of possible syntactic movements and what motivates them. It therefore gives us a better insight into syntactic operations as they apply to morphology. On the other hand, the Merger Theory is broader in that it makes reference to the lexical structure of words; an important feature in a language with extensive verb morphology such as Gikūyū. The use of two theories has therefore given us a broader perspective of, and better insight into, the morphology-syntax interface.

#### 1.7.4 MERGER THEORY (MARANTZ, 1984)

Although Marantz's theory of morphological merger borrows heavily from GB, it also departs from it in several key details. According to Marantz, there are three levels of syntactic representation namely: Logical-Semantic structure (L-S), Syntactic structure (S) and Surface structure together with a lexicon of roots and affixes. The lexical entries of these affixes and roots bear information regarding their argument structure.

The L-S level shows relations that hold among constituents of a sentence such as the one between the predicate and its subject and between a verb and its argument. This level corresponds to GB's level of theta structure more or less. There is also a correspondence between Marantz's S-structure and GB's S-structure. In GB, "X" governs "Y" at S-structure. This is roughly equivalent to Marantz's S-structure in which "Y" bears a grammatical relation with respect to "X". This level therefore displays the grammatical relations between constituents. The surface structure consists of a list of constituents and relations. These constituents are the surface phrase structures of the language. The linear order here is important since it serves as the output to the phonology.

The three levels are constructed independently but are related by the Mapping Principle

which ensures that crucial aspects of structure (those involving grammatical relations) are automatically preserved from one level to the next. That is, the grammar provides lists of structures at the three levels and the Mapping Principle determines which set of structures correspond to each other (Marantz, 1984:56). For example, two lexical items, a root and an affix (morphological categories), at one level of syntactic analysis may correspond to a single derived constituent at the next level.

### 1.7.5 INCORPORATION THEORY (BAKER, 1988a,b)

The Incorporation Theory is even more elaborate in capturing syntactic as well as morphological operations in GFC processes. It was motivated by what Baker regarded as weaknesses in earlier theories that addressed GFC morphemes from a rule-oriented perspective.

Such theories include:

- 1) Transformational Generative Grammar whose transformational rules map one phrase structure onto another.
- 2) Relational Grammar by Perlmutter and Postal (1977) in which rules yield direct representation of grammatical function relationships called relational networks.

He questioned why one rule was applied in favour of another and how a given rule applied to the general system of language. He therefore proposed, like Chomsky (1981), that GFC processes must merely describe clusters of observed properties that arise as side effects of deeper principles of human language. He submitted that all GFC processes involve the syntactic movement of a word (lexical category) rather than the Chomskyan syntactic maximal projections. In Incorporation Theory, all GFC processes are side effects of such movements and

are regarded as being typically associated with the characteristic morphology appearing on the prime verb in a sentence. The characteristic morpheme is generated as an independent lexical item in the underlying syntactic structure. It then moves leaving its original position and combines with the verb.

Baker contends that there are no specific rules for specific GFC processes. Rather, a range of movements that shift categories around in a sentence is all that is needed. There are restrictions however concerning what can move to be incorporated into what. A lexical item can only incorporate the items it properly governs. For example, proper government occurs between a theta role assignor (e.g. VP) and the position to which it assigns a theta role (e.g. object NP).

He concedes that much as many GFC processes can be accounted for by incorporation, there are aspects that are purely morphological. It is morphology that determines whether the result of incorporation is grammatically acceptable in a given language or not. If it is, morphology assigns a PF (phonological form).

Besides, morphology describes the form of complex words be they syntactically (as in incorporation) or lexically formed. The movement of a category to be incorporated in another is a syntactic issue while the result (complex word) is a morphological one. In cases where more than one GFC process is involved, Baker advances the Mirror Principle by which the order of morphological affixation must correspond to syntactic operations.

## 1.8.0

## METHODOLOGY

## 1.8.1

## SAMPLING AND DATA COLLECTION

In order to investigate the distinction between inflection and derivation, we needed to collect data in the form of verbs upon which the distinguishing criteria would be applied. We started by randomly obtaining a list of 300 verbs from the Gikūyū Bible, a Gikūyū novel by Gakaara (1963) and a Gikūyū Monthly called 'Kihooto'. These verbs were categorized according to their transitivity status thus giving us three categories, 'A', 'B' and 'C'. 'A' consisted of transitive verbs, 'B' of intransitive verbs and 'C' of those that can be used both transitively and intransitively. Categories 'A' and 'B' were further sub-typed using the dynamic/stative criterion. In category 'C', the transitive usage tended to be dynamic while the intransitive one was stative. Verb sub-type was therefore not a variable in the behaviour of the verbs.

Since it was not practicable to use all the 300 verbs in our investigation, we had to scale them down by making a further sampling. The verbs in the smaller sample were purposively selected from the larger one in order to represent the intended categories and sub-categories. Initially, we had proposed to use 33 verbs in each of the categories 'A', 'B' and 'C' to give us a rounded total of 100 verbs. Half of the verbs in each category was intended to be dynamic and the other half stative. However, the reality of our data was that it was not possible to get such neat categories (of 33 in each of the categories). For example, from the pre-sample list of 300 verbs that we collected, only 6 could be used both transitively and intransitively. That meant that our sample now consisted of 72 verbs; 33 from each of the categories 'A' and 'B' and all the 6 from category 'C'.

As many as 72 verbs were used in order to test the productivity (frequency in occurrence) and regularity/irregularity in the meaning of these morphemes since both these criteria hinge on numbers. Given that various verb types were represented, this sample was deemed adequate enough to give us a clear picture of the phenomena being investigated. Sampling more verbs from category 'A' and 'B' would have stretched our scope without necessarily altering the findings significantly. As Sebba (1974) says, the adequacy of data depends on the purpose for which the data is intended.

The 72 verbs then had to be affixed with four GFC morphemes in Gikūyū. These morphemes are:

- 1) The passive
- 2) The applicative
- 3) The causative
- 4) The stative.

As mentioned in 'scope and limitations', these were chosen because they are the commonest. The fact that two of these are valency-increasing and the other two valency-reducing means that argument structure will not be an intervening variable.

Next, the derived verbs were tested against four criteria used in distinguishing between inflection from derivation (Bauer, 1988). These are:

- 1) Degree of productivity
- 2) Regularity in meaning
- 3) Placement from the root
- 4) The effect on the syntax of a given sentence.

The second and main part of our study focuses on the morpho-syntactic (GFC)

processes that result from the affixation of the applicative, the causative, the passive and the stative morphemes to the verbs. The data for this part of the study is in the form of sentences generated by the researcher. To form these sentences, verbs were randomly chosen from the categories represented in appendix B (the larger sample of 300 verbs) and then affixed with the GFC morphemes. It was deemed necessary to draw from this sample in order to have a wide *variety of examples. The random sample in Appendix A (the 72 verbs) would have been too restrictive given that the study required numerous examples constructed from various verb categories and sub-categories some of which may not be presented in appendix A.* We have in mind sub-categories such as argumentless and ditransitive verbs which are quite rare in the language. Appendix B was therefore preferred because it contains many (or several) verbs from any given category and sub-category.

The sentences are explained using two syntactic theories that portray how morphology interacts with syntax. These theories are:

- (a) The theory of Merger by Marantz (1984),
- (b) The Theory of Incorporation by Baker (1988a,b).

Above, we have stated that the sentences are generated by the researcher. Our *justification for being our own source of this data is two-fold. Firstly, it has theoretical backing.*

According to Chomsky's (1977 and 1986), any theory of language should answer questions such as: 'What is it that you know when you know a language?' He gives a mentalistic answer in his sub-theory of competence. He sees competence as the native speaker - hearer's knowledge of his language. He divides competence into two types; pragmatic and grammatical. Grammatical competence entails three types of linguistic ability namely: syntactic, semantic and phonological. Syntactic knowledge enables one to string words together to form grammatical

sentences in one's native language and to recognise ill-formed structures including those that he/she has never seen or heard before. Having semantic and phonological knowledge means that one can tell which structures are well or ill-formed in terms of meaning and sound sequence.

Pragmatic competence addresses the role played by extra-linguistic information such as context and our personal views in using and interpreting sentences.

In view of the above, the researcher, being a native speaker of Gikūyū, deemed herself qualified and competent to generate the data needed for analysis. For verification, we also counter-checked our data with three other linguists who are first speakers of Gikūyū.

Secondly, this method has successfully been applied in similar studies such as Mchombo (1993), Matsinhe (1994) and Kioko (1994). Besides, getting the necessary data (derived roots and sentences) from texts was not a viable option given that an inordinately enormous amount would have had to be collected. Even if this were to be done, there would be no guarantee that all the target structures would surface in such data.

## 1.8.2 DATA ANALYSIS

To test to what extent a given morpheme (say the applicative) is inflectional or derivational, we applied the above four criteria one by one. Productivity was determined by the number of verbs in the sample that accept the morpheme. We worked out the percentage of productivity using the Relative Frequency Distribution. The formula for this distribution is:

$N$  = number of verbs in the sample

$F$  = frequency

Proportion of  $F = F \div N$

Percentage of F = pro. of F x 100.

Given that 50% is statistically considered the average figure, high productivity (a feature of inflection) was taken to be an overall percentage of 60 and above while low productivity (a feature of derivation) was an overall of 40 and below. Figures in between were interpreted as borderline.

To determine how regular or irregular the meaning of an affix is, we analysed the meaning(s) of complex verbs. The aim was to investigate whether there is any co-relation between verb type and meaning. Where more than two meanings in a given morpheme occurred regardless of the verb type, then it was considered irregular (hence derivational).

Since it was not practically feasible to test placement from the root and relevance to syntax on all the 72 verbs, we randomly selected a few from each verb type, applied the four morphemes one by one and then used the resultant complex verbs in sentences. It is from these sentences that we determined the placement of a given morpheme from the root. Derivational affixes are said to occur closer to the root than inflectional ones. Relevance to syntax, which is associated with inflection, was taken to mean the effect the affix has on the argument structure of a sentence. For example, we have shown in the 'Literature Review' that the causative morpheme '-i-' turns an intransitive verb (e.g. rakara - become angry) into a monotransitive one (e.g. rakaria - cause to become angry). The other causative morpheme '-ith-' can turn a monotransitive verb into a ditransitive one e.g.

- (1) Ciana nīrainā rūmbo - The children are singing a song (monotransitive)
- (2) Nīrainithia ciana rūmbo - He/she is making the children sing a song (ditransitive)

Concerning the relationship between morphology and syntax in Gikūyū, we begin by

describing the four GFC processes. Examples of sentences before and after the affixation of the GFC morphemes are given as already stated in data collection. The examples are in four lines as shown below:

(3) Mary nīarugīra John irio (orthography)

Mary nī-a-rug-īr-a John irio (underlying morphemic structure)

Mary foc-asp-cook-app-fv John food (morpheme for morpheme)

Mary has cooked food for John. (free translation)

This kind of layout is preferred since it explicitly shows the syntactic structure and also how the morphemes are stringed together. Besides, it makes the data easily accessible to other researchers including those who do not know Gikūyū.

We begin every chapter dealing with a GFC process by discussing the mechanics of the two theories as they apply to that particular process. The claims of the theories are then applied to the Gikūyū GFC processes described before hand. The change in the argument structure of a sentence due to the application of a morpheme was considered a syntactic issue while the merging or incorporation of different lexical items was seen as a morphological one.

Areas in the Gikūyū data where the theories are silent or inadequate are highlighted and where possible, extensions to these theories are suggested in order to equip them to handle such areas.

## 1.9.0 LITERATURE REVIEW

### 1.9.1 INTRODUCTION

The literature reviewed in this chapter has been presented in three sections. The first section provides an overview of studies done on the morphology of Gikūyū both descriptive and theoretical. The second part looks at studies carried out in other Bantu languages on GFC morphemes. The third examines arguments for and against the need for a separate morphological component in language. The last section considers contrasting views regarding the rationale for distinguishing derivation from inflection.

### 1.9.2 LITERATURE ON GIKŪYŪ MORPHOLOGY

Many works exist on the morphology of Gikūyū language but none, to our knowledge, has addressed the dichotomy drawn between inflection and derivation. This division is taken for granted from the onset of these studies. Although scholars have studied Gikūyū morphology from various theoretical perspectives, none, as far as we know, has employed the syntactic theories of merger (Marantz 1984) and incorporation (Baker 1988a,b) to explain the interplay between morphology and syntax.

Among the studies on Gikūyū morphology are some that are structural in orientation. These studies have merely listed and described the suffixes without analysing them. Their main objective in writing appears to be the provision of a simple grammar that could be used by those wishing to learn the language. Examples of such linguists are: Gecaga and Kirkladay (1953), Leakey (1959) and Barlow (1960).

Although Guthrie (1967) and Nurse (1980) have done extensive work on Gikūyū, their

concern is mainly the classification of Bantu languages. Even where morphemes such as the causative are mentioned, they are merely identified and compared in different Bantu languages. This is outside the scope of our work.

Working within Phrase Structure Grammar, Everton (1972) deals with the basic syntax of Gikūyū. He concentrates on the inflectional categories of number in nouns and tense and mood in verbs. Our work and his therefore differ both in content and theoretical orientation.

Yet another study on Gikūyū morphology is Njoroge (1978) which deals with deverbatives (nouns formed from verbs) and other types of nominalizations through affixation. He argues that although nominalization may be done in various ways, affixation is the commonest. He classifies the resultant nouns into agentive, instrumental and abstract ones. He however confines himself to nominalizations unlike our study which deals with GFC morphemes and their syntactic and morphological implications. Unlike us, he operates within the Transformational Generative Grammar.

Perhaps the work most closely related to ours is Gathenji (1981). Our work and hers have in common the morphology of verbal extensions as the primary concern although we employ different theoretical apparatus for analysis. Operating from a functional approach, Gathenji extensively analyses the verbal extensions (suffixes) of various morphological categories and the meaning(s) associated with each e.g. stative, applicative, causative, reversative etc. In addition, she looks at the syntactic implications of this suffixation. For example, she notes that one of the two causative morphemes, '-i-' can convert an intransitive verb into a transitive one thus:

Jane nīarakara ---> Jane nīarakaria mwarimu

Jane has become angry ---> Jane has caused the teacher to be angry

The predicate frame of which is:

rakar-i-a V(X<sub>1</sub>) Ag (X<sub>2</sub>) Goal

V - Verb, (X<sub>1</sub>) - Subject, (X<sub>2</sub>) - Object (Ibid.)

She also looks at the productivity of the suffixes associated with each of these categories and recommends that words containing highly productive affixes should not be given lexical entry. On the contrary, those with affixes of limited productivity should be marked in the lexicon. Her work differs from our study in that she takes productivity to mean 'the potential to occur in all verbs.' She gives a few examples to which a given affix can be added to prove its productivity. In contrast, we have employed productivity as one of the distinguishing criteria between inflection and derivation. The selected suffixes have been tested on a wide range of different verb types randomly selected. This has provided evidence upon which our conclusions have been based.

As mentioned above, the theoretical orientation of Gathenji (1981) is functional. She looks at the effects of given morphemes upon the argument structure of a sentence. She gives the subcategorizational frames of complex verbs using functional labels such as agent, goal etc. Our work explains the same processes from a syntactic point of view. In Marantz's theory of merger, morphologically complex verbs are a result of two separate categories in one syntactic representation (L-S) merging in the next syntactic representation (S level). In Baker's Incorporation Theory, one lexical item moves from its original position to be inside another lexical item thus forming a complex verb.

### 1.9.3 LITERATURE ON GFC MORPHEMES IN OTHER BANTU LANGUAGES

There are also works done on the verb morphology of other Bantu languages. Kioko (1994) deals with the passive and the applicative in Kikamba. Marantz (1984) and Baker (1988a,b) focus on the causative, the passive and the applicative in Chichewa (a Malawian language). Although we have borrowed their theories of Merger and Incorporation respectively, our focus is on the Gikūyū language. Alsina and Mchombo (1989) have looked at the applicative in Chichewa but their theoretical approach is different from ours as is that of Bresnan and Moshi (1988) who have dealt with the same phenomena in Kivunjo (Chaga) within the Lexical Mapping Theory.

Other relevant studies done on non-Kenyan Bantu languages include: Mchombo (1993) who studies the stative and Matsinhe (1994) whose focus is on the causative, the passive, the applicative and the stative among other morphemes. Dubinsky and Simango (1996) look at the passive and the stative, Demuth (1998) at the applicative while Moshi (1998) deals with the applicative. None shares our theoretical orientation however.

### 1.9.4 LITERATURE ON THE PLACE OF MORPHOLOGY

One of the nagging questions in linguistics today, is the place of morphology. Should it be a separate component in the grammar of a language or can it be adequately handled within syntax, phonology or semantics? Although the debate is nothing new, the fact that recent works such as Spencer (1991), Anderson (1990) and Katamba (1993) grapple with it shows that it has not been resolved.

In defence of a separate morphological component, proponents of the Lexicalist Hypothesis posit that lexical formation and sentence formation have no meeting ground. They argue that while sentence formation rules are fully productive and produce grammatical and acceptable strings, the same is not possible with morphological rules. The latter would produce grammatical but non-occurring (in the lexicon) words.

In his discussion of the problems that derivational process present to the Syntactic Transformational Generative Theory, Chomsky (1965:182-192) makes the following significant remarks:

'Quasi-productive' or 'marginally productive' processes i.e., processes underlying, for example, the formation of derivatives such as horror: horrid: horrify, terror (\*terrid): terrify... do pose a problem to the transformational generative theory.

In the case of 'quasi-productive' processes there are no rules of any generality that produce the derived items, as there are in the case of sincerity, destruction and so on.

In a later work (1970), he shows that even productive processes can at times generate grammatical but unacceptable forms. e.g., \*John's 'easiness' to please. Other linguists of similar persuasion are: Marchand (1969), Adams (1973), Leitner (1977) and Matthews (1974).

Katamba (1993) also acknowledges the difference between morphological processes and sentence-formation. He notes that while words are listible in a lexicon, sentences are not.

Words must be listed because their meanings can not always be deduced from their phonological and morphological shape. Also, while sentences (domain of syntax) are constructed to suit each linguistic occasion, new words (morphological domain) are not constructed routinely.

Jackendoff (1975) and Anderson (1988a:167) have summarised some of the differences between word structure rules and sentence structure thus:

(1) While lexical rules apply to the output of other lexical rules (e.g. colony -> coloni-al -> coloni-al-ism), syntactic rules have access to both lexical and syntactic rules, e.g. arrange ->

arrange-ment -> arrange-ment-s.

- (2) While morphological idiosyncrasies are common, syntactic ones are rare, e.g. horrid
- (3) While recursion is very limited in morphology, it occurs quite often in syntax, e.g. great great great grand mother.
- (4) While morphology has paradigms, syntax doesn't.

In a later work, Jackendoff (1983) further argues that grammar has a set of components such as syntax and morphology and that each has its own rules of combination and well-formedness conditions. The same view is held by Culicover (1997) who asserts that each component is completely autonomous since the principles governing each are unique in themselves.

Contrary to those who argue that inflectional morphology and syntax are one and the same, Carstairs (1987) counter-argues that the Inflectional Parsimony Principle separates the two. The principle states that two inflections can not be functionally identical unless they are in complementary distribution. A good example in English is INFL as proposed in the Government and Binding Theory. While the presence of tense in INFL automatically triggers number agreement with the subject, its absence triggers a non-finite clause devoid of a subject. In other words, -tense (marked by infinitives) and +tense are in complementary distribution within INFL. Carstairs further notes that the existence of paradigms in inflections restricts the number of inflectional forms. He too sees syntax as lacking paradigms.

Carstairs' reply is to those scholars who believe that word-structure (morphology) and sentence-structure (syntax) have more similarities than differences. These scholars include Zimmer (1964), Bauer (1978 and 1983), Lakoff (1970), Rose (1973), Botha (1969) and Siegel (1974). Although they agree that giving word structure rules free reign (as is the case in

sentence-structure) may result in grammatical but non-occurring forms, they maintain that the reasons for this non-occurrence may be irrelevant to the language system. To prove this point, Bauer (1983:83) gives the following example of a non-occurring but grammatical sentence that can be generated by sentence-formation rules: 'Peter wrote the lord high Executioner a letter in invincible ink on the back of a live bullock'. He argues that the unlikelihood of the event described therein renders the sentence non-occurrent.


Adding to this argument, Botha (1969) strongly differs with those who posit that morphologically complex words generated by means of productive word-structure rules must be actually occurring/existing words. He sees these rules as having the power to generate many possible words that are not in the lexicon.

Baker (1988:a,b) handles morphological processes from a syntactic point of view. However, he readily admits that morphology and syntax are complementary. He puts it thus:

...incorporation simultaneously has two types of consequence in a linguistic structure: it creates a complex category of the level  $X^0$ , and it creates a syntactic link between two positions in the phrase marker. The first of these is a morphological change, the second a syntactic change. Thus, Incorporation gives a foundation for explaining how and why GF changing processes fundamentally link the two (1988a: 22).

According to him, morphology has two responsibilities, one being to determine whether a structure dominated by an  $X^0$  level category is grammatical or not in a given language and the other to give well-formed categories phonological forms. Thus, morphology filters out certain impossible incorporations (morphological well-formedness condition both in the lexicon and syntax).

In replying to a question in Anderson (1982), "where is morphology?", Marantz (1984:222) says that morphology is everywhere in syntax and in the lexicon. In syntax because



"two (lexical) constituents at any level of syntactic analysis may correspond to a single derived constituent at the next level." In the lexicon because all affixation is lexical. The results of affixation, complex words, are inserted at some level of syntactic analysis.

Let us now briefly turn to the interaction between morphology and phonology and that between morphology and semantics. According to Katamba (1993), purely phonological aspects like vowel harmony dictate the choice of a particular variant of a given morpheme. To give an example in Gikũyũ, the applicative '-er-' is chosen over '-ír-' if the syllable of root or stem has '-e-' as in 'herera'- (apologise). One obvious relation between the two is that phonological rules apply to the output of morphological ones. That is, phonology gives us the pronunciation of a morphological form, be it simple or complex. Prosodic features such as stress play a pivotal role in affixation. Regarding semantics, suffice it to say that it assigns meanings to morphemes be they free or bound, simple or complex. In the case of complex words, the meaning is that of the stem/root combined with that of the affix.

## 1.9.5 LITERATURE ON DERIVATIONAL AND INFLECTIONAL MORPHOLOGY

One of the most contentious issues in morphology today is the distinction drawn between inflection and derivation as word building processes. According to Lyons (1977) derivation is a morphological process that results in the formation of new lexemes e.g. write -> writer. Conversely inflection produces word-forms of a lexeme e.g. write -> write-s. While a lexeme is the abstract but fundamental unit of the lexicon of a language, a word-form is the label given to a particular shape that a word has on a particular occasion (syntactically determined).

In acknowledging this debate, Katamba (1993:20) says:

Grammarians working on the same language may not agree as to which processes are to be treated as inflectional and which ones to be regarded as derivational. Across languages, there can be even greater confusion.

The Extended Standard Theory of the 1970s, following Traditional Grammar, posited that derivational morphemes were present in the pre-syntactic representation of the word while inflectional ones were added transformationally. In other words, derivational morphemes were closer to the root or base than their inflectional counterparts.

The same view is held by Di Sciullo and Williams (1987) who say that affixes that have greater relevance to the syntax appear outside affixes with lesser relevance to syntax. The same is echoed by Anderson (1988) according to whom inflectional properties of words are assigned by the syntax depending on how a word interacts with other words in a phrase, clause or sentence.

Greenberg (1954), wishing to characterize inflection, proposed the criterion of obligatoriness according to which syntax imposes obligatory choices from a variety of affixes. The wrong choice leads to ungrammaticality as in a case where the number of the demonstrative pronoun does not agree with that of the noun it modifies. Once again, this boils down to the relevance of syntax in inflection.

In challenging the Extended Standard theorists and those of similar persuasions, linguists working within the Lexicalist Hypothesis stated that both inflection and derivation should be handled non-transformationally using the same mechanism (in the lexicon). Williams (1981), Lieber (1981) and Selkirk (1982) among others have noted that there are languages in which inflectional affixes are found inside derivational ones. They are also opposed to handling the two branches using different rules since this blurs the many similarities that the two share.

It has also been noted that even categories that are classified as inflectional due to their relevance to syntax contain exceptions. Halle (1973) reports that there are about 100 Russian verbs that are defective since they don't mark first person singular present tense, e.g. *lavzu* (I climb), *povzu* (I conquer). Should these, therefore, be regarded as derivations or exceptions to the rule?

Interestingly, there are cases that are borderline between inflection and derivation. Matthews (1974) looks at V-en/V-ed forms in English and concludes that they have an adjectival (hence derivation) role and a past participial one (hence inflection). He gives the examples: 'a crowded room' in which the '-ed' turns the noun/verb 'crowd' into the adjectival participle 'crowded'. On the contrary, '-ed' as in 'the room was heated by someone' is inflectional since 'heated' is the past participle of the verb 'heat'. Others who have looked at this -ed/-en problem in English are Allen (1978), Lieber (1981) and Scalice (1984). Other suffixes that exhibit the same ambivalence are -er and -ing (Booij, 1996; Beard, 1995). Another notable observation made by Matthews is that an affix may change from being inflectional to being derivational and back again over a period of time. The example cited here is the Latin morpheme -sc- which means 'to begin to become' among other things. Our study however, being synchronic, does not intend to address etymological evolution of morphemes.

Closer home, Katamba (1993:211) gives evidence of inflectional affixes that could also be used derivationally in Luganda.

Singula- Kasolya (class 12)

Gloss- roof

Plural- Busolya (class 14)

Gloss - roofs

Diminutive

Singular-	mu-kazi (class 1) ->	<u>Ka</u> -Kazi (Class 12)
Gloss -	woman	-> Little woman
Plural-	ba-kazi (class 2) ->	<u>bu</u> -kazi (class 14)
Gloss -	women	-> Little women

In the above data, 'ka-' and 'bu-' function as unmarked class markers (inflectional) and diminutive prefixes (derivational). Bauer (1983:39) cites the ambivalence in morphologically marked adjectives regarding their status as inflectional or derivational morphemes. Although derivationally complex morphemes are said to be replaceable with monomorphemic forms, some adjectives defy this in given contexts. The sentences below exemplify this:

1. a) It is getting colder
- b) It is getting cold
2. a) Siberia is colder than Denmark
- b) \* Siberia is cold than Denmark

Does this suggest that the comparative in '1a' should be derivational and that in '2a' inflectional?

In a later work, Bauer (1988) extensively addresses this vexing dichotomy problem. He discusses various criteria by which inflection may be distinguished from derivation and gives the strengths and weaknesses of each criterion. His data comes from different languages Bantu ones included. In the final analysis, he states that the criteria are more useful within a language than across languages.

Katamba (1993:212) agrees with Bauer. He says, "We cannot assume that, if a category is treated as an inflection in one language, it will be inflectional in the next language we

encounter".

Anderson (1990) also bears witness to this when he says that number (regarded as inflectional in many languages) is optionally marked in Chinese and Vietnamese. This upsets Greenberg's notion of obligatoriness.

## 1.9.6 CONCLUSION

In the foregoing discussion, we have established that there is marked controversy regarding the distinction between inflection and derivation on the one hand and the place of morphology in the grammar of a language on the other. In formulating our preliminary task, we have taken cue from Katamba (1993:206) who asserts that, "... there is need for a principled way of determining whether a given process is inflectional or derivational."

Concerning the second controversy mentioned in the statement of the problem, we believe that morphology is a component in its own right and that it interacts closely with the other components of grammar. By using two syntactically-oriented theories, we have endeavoured to show how syntax interacts with morphology in explaining grammatical function changing processes in Gikūyū.

## CHAPTER 2

### THE DISTINCTION BETWEEN INFLECTION AND DERIVATION

#### 2.0 INTRODUCTION

In this chapter we will deal with the distinction normally drawn between inflectional and derivational morphology. As defined in chapter 1 section 1.9.4, inflection is a morphological process that results in the formation of new word-forms from a base lexeme while derivation yields new lexemes (Lyons, 1977).

From the literature review, we have seen that opinion is divided regarding the justification for making this distinction. Some linguists like Katamba (1993) support it and others like Williams (1981) renounce it. Since we cannot take either stand in relation to Gikūyū morphology in a vacuum, we have collected data in the form of verb-roots to which we have suffixed certain morphemes said to be derivational in order to determine, on the basis of the four criteria, whether a particular morpheme is derivational or inflectional.

As mentioned in chapter one, these morphemes are: 1) the causative, 2) the passive 3) the applicative and 4) the stative. According to Gathenji (1981) and Barlow (1960), these morphemes are derivational. It is on the complex verbs formed after the suffixation of these morphemes that we have applied the four major criteria used in making the distinction between inflection and derivation. These criteria are: 1) productivity 2) regularity in meaning 3) placement from the root and 4) relevance to syntax. (See section 1.8.1).

#### 2.1 The forms of the morphemes

Causation in Gikūyū is marked by two morphemes; -i- and -ithi-. The distribution of the

two is such that *-ithi-* occurs with all verb types (with the exception of a negligible number of stative intransitive verbs such as *'riūka'*-resurrect). On the other hand, *-i-* typically occurs with intransitive verbs (see appendix A).

The passive morpheme is realized by the addition of *-w-* to a verb immediately before the final vowel, if the verb-root ends in a consonant. The affixation of the passive morpheme changes the final vowel from *-a* to *-o* e.g. *'rug-a'* (cook)-> *'rug-w-o'* (be cooked). In some instances, the *-w-* is then deleted leaving behind the final *-o* as the passive marker e.g. *'te'* (throw away) -> *'te-w-o'* -> *'te-o'* (be thrown away). This happens when the verb-root ends in a vowel.

The applicative morpheme has two variants, *-er-* and *-īr-* e.g. *'thek-a'* (laugh) -> *'thek-er-a'* (laugh for/ while in /at) and *'gūr-a'* (buy) -> *'gūr-īr-a'* (buy for/ while in/ at). This choice is phonologically conditioned such that *-er-* is used when the verb-root or stem contains either *-e-* or *-o-* as the penultimate vowel while *-īr-* is used elsewhere.

Like the causative morpheme, the stative is marked by two morphemes; *-k-* and *-īk/ek-* (differences between the two will be discussed in detail in chapter 6). The occurrence of *-īk/ek-* is phonologically conditioned and follows the same distributional pattern as that between the applicative *-īr-* and *-er-* e.g. *'thom-a'* (read) -> *'thom-ek-a'* (readable) and *'gaath-a'* (tighten) -> *'gaath-īk-a'* -> (tightenable).

## 2.2 The verb-roots.

We have found it necessary to sample various categories and sub-categories of verb-roots to guard against the issue of verb-type being an intervening variable. That is, it is possible that different types of verbs will behave differently when suffixed with the same morpheme. The categories we have sampled are: transitive, intransitive and transitive/intransitive verb roots. The

sub-categories are: dynamic and stative. We have noted that the transitive/intransitive roots are rare in Gikūyū and we have only managed to come up with six. This low number can be explained by the fact that in Gikūyū, transitivity of otherwise intransitive verbs can be morphologically achieved. Thus, an intransitive verb (one with one argument) can be converted into a transitive verb with two or more nominals through the affixation of morphemes such as the causative. We have deviated from works such as Quirk et al. (1985) in which object deletion is treated as a case of verb conversion from the transitive class into the intransitive one e.g. John ate lunch (transitive), John ate (intransitive). This deviation is motivated by the fact that we are working within theories that stem from Chomsky's Government and Binding Theory, according to which a trace marked ( $t_i$ ) is left behind by any constituent that is moved elsewhere or is deleted. The trace safeguards, so to speak, that position from occupation by other elements that don't belong. The question of conversion does, therefore, not arise since the said elements can be retrieved. For this reason, we have treated verbs that allow object deletion without causing ungrammaticality as transitive verbs.

### **2.3 The criteria for distinguishing between inflection and derivation.**

After explaining the nature of our sample, we now proceed to test the first distinguishing criterion namely productivity.

#### **2.3.1.0 PRODUCTIVITY**

According to Katamba (1993:60), productivity is a matter of generality. A given word-formation process is said to be very productive if it affects a vast number of forms and creates

very many words. Such a process is said to be characteristic of inflection rather than derivation. Since productivity is a question of numbers, the intention here is to observe how many of these verbs accept the causative, the passive, the applicative and the stative morphemes. Below we present a representative sample of the data tabulated in appendix A. This is for the purpose of providing a 'sneak' picture of the way the data behaves. Percentages will however be worked out based on the data in appendix A in order to get a fuller picture.

**TABLE 1**  
**DYNAMIC TRANSITIVE VERB-ROOTS**

Verb-root	Gloss	Causative	Passive	Applicative	Stative
Endi-	Sell	Endithia	Endio	Enderia	Endeka
Tem-	Cut	Temithia	Temwo	Temera	Temeka
Tũm-	Send	Tũmithia	Tũmwo	Tũmĩra	Tũmĩka
Ger-	Measure	Gerithia	Gerwo	Gerera	Gereka
Gũr-	Buy	Gũrithia	Gũrwo	Gũrĩra	Gũrĩka

TABLE 2

## STATIVE TRANSITIVE VERB-ROOTS

Verb-root	Gloss	Causative	Passive	Applicative	Stative
Meny-	Know	Menyithia	Menywo	Menyera	Menyeka
Men-	Hate	Menithia	Menwo	Menera	Meneka
Hiti-	Miss	Hithia	Hitio	Hitira	Hitika
Gi-	Have/get	Githia	Giwo	Gira	Gika
Hok-	Trust	?	Hokwo	Hokera	Hokeka

TABLE 3

## STATIVE INTRANSITIVE VERB-ROOTS

Verb-root	Gloss	Causative	Passive	Applicative	Stative
Ken-	Become happy	Kenia, kenithia	Kenwo	Kenera	Keneka
Nog-	Become tired	Nogia, nogithia	Nogwo	Nogera	Nogeka
Ku-	Die	Kuithia	Kuo	Kuira	?
Heh-	Become cold	Hehia, hehithia	?	Hehera	Heheka
Buth-	Rot	Buthia	?	Buthira	Buthika

**TABLE 4**  
**DYNAMIC INTRANSITIVE VERB-ROOTS**

Verb-root	Gloss	Causative	Passive	Applicative	Stative
Tet-	Complain	Tetia, tetithia	Tetwo	Tetera	Teteka
Inam-	Bend	Inamia, inamithia	Inamwo	Inamira	Inamika
Eher-	move away	Eheria, eherithia	Eherwo	Eherera	Ehereka
Kiny-	Arrive	Kinyia, kinyithia	Kinywo	Kinyira	Kinyika
Uk-	Come	Ukithia	Ukwo	Ukira	Ukika

**TABLE 5**  
**TRANSITIVE/INTRANSITIVE VERB-ROOTS**

Verb-root	Gloss	Causative	Passive	Applicative	Stative
Ūr-	Lose/get lost	?	Ūrwo	Ūrira	?
Un-	Break/burst	Unithia	Unwo	Unira	Unika
Tum-	Seal	Tumia, tumithia	Tumwo	Tumira	Tumika
Cam-	Taste	Camia, camithia	Camwo	Camira	Camika
Mer-	Grow	Meria, merithia	Merwo	Merera	?

### 2.3.1.1 THE CAUSATIVE

From the data tabulated in the tables above, we see that the causative affix has a high incidence of occurrence. Actually, 70 out of the 72 verbs sampled in appendix A can take this morpheme. This makes 96.7%. The causative morpheme is therefore highly productive since only a few exceptions appear among the stative transitive verbs such as 'hok-' (trust) in table 2 and the transitive/intransitive verbs such as 'ür-' (lose/get lost) in table 5. It is possible to predict where these exceptions will occur since the affected verb-roots have something in common. They are stative with the state denoted being intrinsic (occurring from within and not forced extraneously). For this reason, external causation is not possible here hence the blocking of the causative morpheme. Such verbs are indeed rare in Gikūyũ.

### 2.3.1.2 THE PASSIVE

The data also reveals that the passive morpheme is highly productive since 68 out of 72 verbs in appendix A accept it. All the dynamic transitive verbs are passivizable. It is interesting to note that unlike in English where intransitives do not passivize, there are only a few stative intransitive verbs in Gikūyũ that do not (see table 3). These exceptions apply to verbs that have something to do with temperature (weather) such as 'heh-'(be cold) and those in which the actual state or process denoted by the verb takes place from within e.g. 'buth-' (rot). The percentage of productivity here is 94.2%.

### 2.3.1.3 THE APPLICATIVE

From our data, the applicative morpheme has a 100% incidence of occurrence in all the verb types. This means that all the 72 verbs can actually take this morpheme hence 100% productivity. This is probably because it has multiple meanings as we shall see in section 2.3.2

and therefore where one is blocked, another is allowed.

#### 2.3.1.4 THE STATIVE

Lastly, although the stative morpheme is the least productive among the four, we have noted that 66 out of 72 of the verbs in our sample accept the morpheme. This makes 91.7%. This is high productivity by any standards. Indeed, full productivity of any morpheme in any language is a rare phenomenon. Katamba, (1993:60) observes that "productivity is a matter of degree. Probably, no process is so general that it affects without exception all the bases to which it could potentially apply." Verbs that do not accept the stative morpheme mainly appear among the stative intransitive category (see table 3) and this is because, as we have said, the state denoted is intrinsic.

Since high productivity is associated with inflectional categories such as tense and number, we can conclude from our analysis that the causative, the passive, the applicative and the stative morphemes in Gikūyū are inflectional if judged against this criterion. This is contrary to popular classification e.g. Barlow (1960) and Gathenji (1981) where the said morphemes are considered derivational.

#### 2.3.2.0 REGULARITY IN MEANING

The second criterion used is regularity in meaning. An affix is said to be regular in meaning if the words it derives have a consistent and predictable meaning. For example, a verb in English that takes '-er' becomes a noun with the predictable meaning of 'doer of the verb'. On the other hand, verbs that take '-ant' thereby becoming nouns do not have a consistent meaning e.g. defend-ant (one who is required to answer to some charges) and account-ant (one who keeps financial records). This suffix is therefore irregular in meaning. In our study, the question

is whether a given morpheme confers the same meaning to all the verbs it is affixed to.

### 2.3.2.1 THE CAUSATIVE

Starting with the causative, we find that the two morphemes are associated with different meanings as shown below:

(i) The *-i-* variant means, 'cause the state denoted by the verb without using coercion'.

(ii) The *-ithi-* variant could carry any of the three meanings below:

(a) Bring an action about using direct coercion (force somebody to do something)

(b) Bring about an action or state by forcing oneself to do something or to assume a certain state. (self-coercion)

(c) Have somebody do something to somebody else. (indirect coercion).

Basically, the difference between the *-i-* and the *-ithi-* morphemes is that the *-i-* involves non-coercive causation while the *-ithi-* entails coercion. We also note that when used in certain contexts, some stative verbs resemble the causative morpheme but do not necessarily have a causative meaning e.g. 'meria' (grow), 'kuithia' (lose through death) as in :

(1) Mwana niarameria magego.

The child is growing teeth

(2) Riu niakuithia ciana igiri.

Now she/he has lost (through death) two children.

Despite the occurrence of *-i-* and *-ithi-*, there is no causation in the sentences above.

According to Bauer (1988), regularity in meaning is associated with inflectional

morphemes. That is, the addition of an inflectional morpheme brings with it only one meaning e.g. plurality and tense. One can therefore predict what a complex word will mean after the affixation of such a morpheme. We have already seen that *-i-* has a non-coercive meaning and that *-ithi-* involves coercive causation. Although there are different types of coercive causation or manipulation, we can predict where each will occur on the basis of the verb valency. For example, if the causative verb is followed by one nominal, (in this case the one affected by the verb hence causee) then the coercion is of the direct type. e.g.

(3) Mwarimū nīakomithia ciana.

Mwarimū nī-a- a-kom-ithi-a ciana.

Teacher foc-sub-tns-lie down-caus-fv children.

The teacher has forced/made the children (to) lie down.

'Ciana'-(children) is the causee and follows the causative verb 'komithia'-(make lie down). The same meaning obtains if the causative verb is followed by two nominals one being the causee and the other the patient (the one that suffers the action performed by the causee). Here, the causee is adjacent to the verb and is followed by the patient e.g.

(4) John nīarugithia Njeri irio.

John nī-a-a-rug-ithi-a Njeri irio.

John foc-sub-tns-cook-caus-fv Njeri food.

John forced/made Njeri (to) cook food.

'Njeri' is the causee while 'irio'-(food) is the patient.

If, however, the nominal in subject position (the one that initiates the action/state hence causer) and the causee are co-referents, the meaning is that of self-coercion. That is, making oneself do something or enter a certain state unnaturally or by simulation e.g.

- (5) Mwana ehūnithia irio (atarī mūhūnu)  
 Mwana e-hūn-ithi-a irio (atarī mūhūnu)  
 Child refl-be full-caus-fv food (while not full)  
 The child pretended to be full (while actually he was not)

Above, 'mwana'-(child) is both the causer and the causee.

In cases where the causative verb is followed by two nominals with the patient appearing next to the verb then followed by the causee, the meaning entails mediated/indirect coercion. e.g.

- (6) Cibū nīahūrithia mūici thigari.  
 Cibū nī-a-a-hūr-ithi-a mūici thigari.  
 Chief foc-sub-beat- caus- fv thief police.  
 The chief had the thief beaten by the police.

It would appear from the foregoing that the meaning of the causative morpheme is quite predictable and regular. This seems to suggest that the causative is inflectional.

### 2.3.2.2 THE PASSIVE

Like the causative, the passive morpheme also appears to have a very regular meaning. When attached to transitive verbs, it introduces the meaning that the object of the underived verb suffered the action indicated by the verb. With intransitive verbs, the interpretation is that the subject of the underived verb experiences the state named by the verb. The following examples instantiate this:

(7a) Thigari nīciaratha mūici.

Thigari nī-ci-a-rath-a mūici.

Police foc-sub-tns-shoot-fv thief.

The police have shot the thief.

(7b) Mūici nīarathwo (nī thigari).

Mūici nī-a-a-rath-w-o (nī thigari).

Thief foc-sub-tns-shoot-pas-fv (by police)

The thief has been shot (by the police).

(8a) Andū nīmaakena.

Andū nī-ma-a-ken-a.

People foc-sub-tns-become happy-fv.

People have become happy.

(8b) Nīgwakenwo (nī andū).

Nī-kū-a-ken-w-o (nī andū).

Foc-expl-tns-pas-fv (by people).

There has become happy (by people).

In the passive 7(b), 'mūici'-(thief), which is the logical object, suffers the action of being shot. In 8(b), 'andū'-(people), which is the subject in 8(a), undergoes the experience of being happy.

Since regularity in meaning is said to be a feature of inflection, it would appear that the passive is also inflectional.

### 2.3.2.3 THE APPLICATIVE

A verb that has taken the applicative morpheme (thereby becoming an applied verb) introduces a new nominal absent in the non-applicative construction. An example is given in 9(b) below, where the new nominal is 'mwana'-(child).

(9a) Mami nīaruga irio 'mother has cooked food'.(non- applicative).

(9b) Mami nīarug-ĩr-a mwana irio 'Mother has cooked food for the child' (applicative).

The meaning of the applicative verb can not be determined independently of the newly introduced nominal (applied nominal). Depending on this nominal, various meanings are possible. These include:

(i) locative

(ii) benefactive (gaining from the action of the verb)

(iii) malefactive (being adversely affected by the action of the verb)

- (iv) motive (the reason)
- (v) the possessor (the owner)
- (vi) the possessed (the owned)

The meaning of an applied nominal can easily be predicted on the basis of its syntactic position- which is rigidly fixed- in a construction containing the maximum number of applied nominals. This applies whether the applied verb is transitive or intransitive. Consider:

(10a) Nĩenyũra mũgate.

Nĩ-a-a-enyũr-a mugate.

Foc-sub-tns-cut-fv bread.

She/he has cut bread.

(10b) Eenyurira mutumia mwana mugate njiraini thoni.

A-a-enyũr-ĩr-a mũtumia mwana mũgate njĩrainĩ thoni.

Sub-tns-cut-app-fv woman child bread at the path embarrassment.

(i) She/he has cut bread for the woman's child while at the path because of embarrassment.

(ii) She/he has cut bread for the child on behalf of the woman while at the path because of embarrassment.

(11a) Jesũ nĩakua.

Jesũ nĩ-a-a-ku-a.

Jesus foc-sub-tns-die-fv.

Jesus has died.

(11b) Jesū nīakuīra Ngai andū mūtharabainī wendo.

Jesū nī-a-a-ku-īr-a Ngai andū mūtharabainī wendo.

Jesus foc-sub-tns-die-app-fv God people on the cross love.

(i) Jesus has died for God's people on the cross because of love.

(ii) Jesus has died for people on behalf of God because of love.

When we contrast the transitive (underived) 10(a) and the intransitive 11(a) on the one hand with the applied 10(b) and 11(b) on the other, we see that four nominals have been introduced in the latter. The following semantic predictions can be made about these nominals and indeed any such others in similar constructions.

(i) The first applied nominal will be interpreted as the indirect beneficiary/maleficiary or possessor e.g. 'mūtumia'- (woman) in 10(b) and 'Ngai'- (God) in 11(b).

(ii) The second applied nominal is the direct beneficiary/maleficiary or the possessed e.g. 'mwana'- (child) in 10(b) and 'andū'- (people) in 11(b).

(iii) The third applied nominal is the locative e.g. 'njiraini'- (at the path) in 10(b) and 'mūtharabaini'- (at the cross) in 11(b).

(iv) The fourth applied nominal is the motive e.g. 'thoni'- (embarrassment) in 10(b) and 'wendo'- (love) in 11(b).

Since regularity/predictability in meaning is associated with inflectional morphemes, the implication here is that the applicative morpheme is inflectional.

## 2.3.2.4 THE STATIVE

The meanings of the two stative morphemes can be predicted fairly easily. '-ik-' has only one meaning which is 'can/could be Xed', where X stands for a given verb. This is regardless of whether the verb is transitive or intransitive. e.g.

(12a) Mami nīaruga irio.

Mami nī-a-a-rug-a irio.

Mother foc-sub-tns-cook-fv food.

Mother has cooked food.

(12b) Irio nīciarugīka.

Irio nī-ci-a-rug-īk-a.

Food foc-sub-tns-cook-stat-fv.

Food has been cookable.

(13a) Mūthuuri nīahorera.

Mūthuuri nī-a-a-horer-a.

Husband foc-sub-tns-calm down-fv.

The husband has calmed down.

(13b) Mūthuuri nīahorereka.

Mūthuuri nī-a-a-horer-ek-a.

Husband foc-sub-tns-placate-fv.

The husband has been 'placatable'/ possible to calm down.

The verb in 12 is transitive but the one in 13 is intransitive. In 12, the food can be cooked and is therefore 'cookable'. In 13, it is possible to placate the husband and therefore he is 'placatable'.

The '-k-' stative invariably means that the action indicated by the verb takes place spontaneously e.g.

(14) Burana nīyambūka

Būrana nī-ī-a-amb-ū-k-a

Cardigan foc-sub-tns-make-rev-stat-fv

The cardigan has become undone

The indication is therefore that the stative is an inflectional category since the meaning of any verb it attaches to is predictable.

### 2.3.3.0 PLACEMENT FROM THE ROOT

The third criterion we now turn to is placement from the root. Inflectional morphemes are said to be placed outside derivational ones where both co-occur in a word. i.e. the derivational ones appear next to the root in such cases. Take a word like 'movements' in English for example; '-ment' is immediately adjacent to the base word 'move' while '-s' is on the periphery.

We begin with the assumption that aspect in Gikūyū, as is assumed in many languages, is inflectional. Our justification for picking on aspect is that among the so-called inflectional morphemes, (these are number, tense and agreement) it is the only one realized as a suffix and so we can juxtapose it with the four morphemes under study. It should be noted that

all of them are positioned post-verbally and therefore are comparable to the aspect morpheme. The (a) examples in the following sentences are in the perfective aspect while the (b) sentences are in the imperfect (habitual) aspect.

### 2.3.3.1 THE CAUSATIVE

(15a) Njūgūna arandikithirie ciana marūa.

Njūgūna a-ra-andik-ith-ir-i-e ciana marūa.

Njūgūna sub-tns-write-caus-perf-caus-fv children a letter.

Njūgūna made/forced the children (to) write a letter.

(15b) Njūgūna andikithagia ciana marūa.

Njūgūna a-andik-ith-ag-i-a ciana marūa.

Njūgūna sub-write-caus-imperf-caus-fv children letter.

Njūgūna makes/forces the children write (to) a letter.

We start by claiming that the full causative morpheme present in 15(a) and (b) is '-ithi-' as earlier established in 2.1. This now gives the stem 'andik-ithi-<sup>1</sup>'. This being the case, it is peculiar that '-ithi-' is split into two by the aspect morpheme (-ir-), which is wedged between the two parts of '-ithi-'. This split is predictable and can be explained in terms of the morphemic structure of a word.

The language apparently doesn't allow a stem ending in a vowel to take another morpheme that begins in a vowel. Going by our argument, the stem in 15(a) and (b) ends in 'i'

<sup>1</sup> Our rationale for alleging that the full causative affix '-ithi-' is placed next to the root, is the fact that in Gikūyū, other GFC morphemes like the applicative and the stative also occupy a similar position as we shall see shortly. It has also been observed that in Tsonga (a Malawian Bantu language) the causative

while the aspect begins with 'i' and 'a' respectively. To eliminate this vowel-adjacency problem, the last vowel of the stem interchanges positions with the next morpheme<sup>2</sup> through the process of metathesis. This yields the sequence observed in 15(a) and (b) where the last 'i' of '-ithi-' changes positions with '-ir-' and '-ag-' respectively. The same argument holds for 16(a) and (b) below:

- (16a) Njūgūna ararakaririe mwarimū.  
 Njūgūna a-ra-rakar-ir-i-e mwarimū.  
 Njūgūna sub-tns-be annoyed-perf-caus-fv teacher.  
 Njūgūna caused the teacher to be annoyed.

- (16b) Njūgūna arakaragia mwarimū  
 Njūgūna a-rakar-ag-i-a mwarimū.  
 Njūgūna sub-be annoyed-imperf-caus-fv teacher.  
 Njūgūna causes the teacher to be annoyed.

Again, the assumption here is that the base position of the causative morpheme '-i-' is the slot immediately after the root (thus 'rakar-i-' is the stem). After metathesis has applied, the causative '-i-' now occupies the penultimate slot while the aspect morphemes appear next to the root.

From the above claims, we have seen that the two causative morphemes are placed

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appears first where there is a concatenation of post-verbal affixes (Matsinhe, 1994).

<sup>2</sup> Perhaps we should point out that metathesis doesn't just affect the causative and the aspect morphemes. Consider: 'Aandik-ith-ir-i-a'- (he has made write for/at/to) and 'Aandik-ith-an-i-a'- (he has made others write). The applicative(-ir-) and the associative(-an-) morphemes in the first and second example respectively, have changed positions with the causative '-i-'.

before the perfect and the imperfect morphemes. Verb-type is irrelevant since 'write' in (15) is intransitive while 'be annoyed' in (16) is intransitive. This points us towards the conclusion that the causative morphemes are derivational by virtue of appearing next to the verb-root while the perfect and imperfect morphemes are inflectional since they are further away.

### 2.3.3.2 THE PASSIVE

We now look at the placement of the passive morpheme.

(17a) Kamau arandikirwo nĩ karani.

Kamau a-ra-andik-ir-ũ-o nĩ Karani.

Kamau sub-tns-employ-perf-pas-fv by clerk

Kamau was employed by the clerk.

(17b) Kamau aandikagwo nĩ karani.

Kamau a-andik-ag-ũ-o nĩ karani.

Kamau sub-employ-imperf-pas-fv by clerk.

Kamau gets employed by the clerk.

(18a) Kūrarakarirwo mūno ira.

Kū-ra-rakar-ir-ũ-o muno ira.

Expl-pst-be annoyed-perf-pas-fv very yesterday.

There got people annoyed yesterday./People got annoyed yesterday.

(18b) Kūrakaragwo hĩndĩ ciothe.

Kūrakar-ag-ū-o hīndī ciothe.

Expl-be annoyed-imperf-pas-fv time all.

There gets people annoyed all the time/People get annoyed all the time.

As will be argued in section 5.2.0, the underlying passive morpheme is ‘-ū-’. Following the analysis given for the causative above, we assume that the base position of ‘-ū-’ is the position adjacent to the root-verb<sup>3</sup> (hence ‘andik-ū-’ in 17 and ‘rakar-ū-’ in 18 as the stems). The passive and the aspect morphemes then metathesize. What this suggests is that the metathesis process precedes the gliding of the vowels ‘-ū-’ (passive) and ‘-a’ (final vowel) to form ‘-w-’. The final vowel subsequently changes from ‘-a’ to ‘-o’ as we shall show in section 5.2.0. Examples (17) and (18) above therefore indicate that the passive morpheme is placed inside the perfect and imperfect morphemes thus making it acquire a derivational characteristic. The perfect and imperfect morphemes in these examples can be considered inflectional due to their peripheral position relative to the verb-root.

### 2.3.3.3 THE APPLICATIVE

The sentences below exemplify the positioning of the applicative morpheme.

(19a) Kamau arandikūire mwarimū marūa.

Kamau a-ra-andik-īr-ir-e mwarimū marūa.

Kamau sub-tns-write-appl-perf-fv teacher letter.

Kamau wrote a letter to/for the teacher.

<sup>3</sup> This positioning has also been observed in Setswana (a Southern African Bantu language) by Chikane (1998).

(19b) Kamau aandikagĩra mwarimũ marũa.

Kamau a-andik-ag-ĩr-a mwarimũ marũa.

Kamau sub-writes-imperf-appl-fv mwarimũ.

Kamau writes a letter to/for the teacher.

(20a) Kamau ararakariire mwarimũ.

Kamau a-ra-rakar-ĩr-ir-e mwarimũ.

Kamau sub-tns-be annoyed-appl-perf-fv teacher.

Kamau got annoyed with the teacher.

(20b) Kamau arakaragĩra mwarimũ.

Kamau a-rakar-ag-ĩr-a mwarimũ.

Kamau sub-be annoyed-imperf-appl-fv teacher.

Kamau gets annoyed with the teacher.

In examples 19(a) and 20(a), the applicative appears next to the root and before the perfect aspect hence suggesting that the former is derivational and the latter inflectional. However, in 19(b) and 20(b), the applicative appears after the imperfect aspect thus behaving like an inflectional morpheme. Since the results are conflicting, it is not possible to say whether or not the applicative is inflectional or derivational when tested against this criterion.

#### 2.3.3.4 THE STATIVE

Finally we turn to the placement of the stative morpheme.

(21a) Marūa nīmarandikīkire.

Marūa nī-ma-ra-andik-īk-ir-e.

Letter foc-sub-tns-write-stat-perf-fv.

The letter became writable / The letter was possible to write

(21b) Marūa nīmandikīkaga.

Marūa nī-ma-a-andik-īk-ag-a

Letter foc-sub-tns-write-stat-imperf-fv.

The letter is normally writable/ It is possible to write the letter.

(22a) Kamau ararakaīkire narua mūno.

Kamau a-ra-rakar-īk-ir-e narua mūno.

Kamau sub-tns-be annoyed-stat-perf-fv easily very.

Kamau was annoying very fast/ it was possible to annoy Kamau very fast.

(22b) Kamau arakaīkaga narua mūno.

Kamau a-rakar-īk-ag-a narua mūno.

Kamau sub-be annoyed-stat-imperf-fv easily very.

Kamau is normally very easily annoying.

The four examples show that the stative morpheme is derivational on the basis of this criterion.

By looking at all the results, we can conclude that the passive and the causative morphemes show derivational characteristics since they appear inside the aspect morpheme

which is typically analysed as an inflectional category. This is the case regardless of the verb type or sub-type ('andik-' (write) is dynamic and transitive while 'rakar-' (be annoyed) is stative and intransitive).

A pertinent question then arises as to how the aspect morpheme should be treated. When juxtaposed with the causative, the passive and the stative morphemes, it appears on the periphery, a fact that would make it inflectional. This is contradicted by the applicative 19(b) and 20(b) in which the imperfect morpheme is placed next to the root thus suggesting derivational status.

In general, the placement of the four morphemes under investigation relative to the verb-root seems to suggest that the morphemes have derivational status.

#### 2.3.4 RELEVANCE TO SYNTAX

The last criterion we have used concerns the relevance of a morpheme to the syntax of a sentence. It is associated with the inflectional categories. As Bauer (1988) and Katamba (1993) readily admit, relevance to syntax is difficult to define and different people may understand it differently. However, we have borrowed a few key notions from the two linguists in order to try and understand it. It is said that such morphemes are obligatory and if others are chosen in their stead, ungrammaticality results e.g. This boy/\*boys, The boy goes/\*go. The singular morpheme on the noun 'boy' and the verb 'goes' is therefore obligatory and hence relevant to the syntax of the structures in question.

It has also been observed that such morphemes have syntactic consequences or are syntactically pertinent. We have taken syntactic consequences to mean the ability of a morpheme to alter the valency of a verb by changing its sub-categorizational frame (Katamba, Ibid). This, for example, means that an intransitive verb with only one noun (subject) could end up requiring

another noun (e.g. object) when the morpheme is added. Below we give sentences that will enable us to look at the effect of the four morphemes on syntax.

### 2.3.4.1 THE CAUSATIVE

Transitive verbs, whether dynamic or stative, require two participants; the subject and the object. The verbs in (23) and (24) below are dynamic and stative respectively.

(23a) Mũthuri nĩatema mũtĩ.

The man has cut the tree.

The subject here is 'mũthuri'-(man) while the object is 'mũtĩ'-(tree). When we affix the causative morpheme -ithi-, a third participant, the causee, is introduced. e.g.

(23b) Mũthuri nĩatem-ithi-a kahĩ mũtĩ.

The man made/forced the boy (to) cut the tree.

This newly introduced participant 'kahĩ'-(boy), is obligatory if the meaning of direct manipulation of the boy is to be retained otherwise ungrammaticality occurs.

(24a) Mwana nĩamenya anja.

The child has known the answer.

(24b) Mwarimũ nĩameny-ithi-a mwana anja.

The teacher has made the answer known to the child

Here we have introduced an obligatory participant 'causer' (mwarimũ- teacher) without which the sentence is ungrammatical. In examples 23(b) and 24(b), the causative morpheme has syntactic consequences since it expands the valency of the transitive verbs 'tem-' (cut) and 'men-' (hate) by one.

Intransitive verb-roots sub-categorize for only one participant. e.g.

(25a) Mwana nĩatheka.

The child has laughed.

(25b) Wangeci nĩathek-i-a mwana.

Wangeci has caused the child to laugh.

The addition of the causative morpheme expands the sub-categorizational frame of the verbs. In 25(b), Wangeci is the causer and 'mwana'-(child) is the causee. Neither is omissible without occasioning ungrammaticality. When applied to the dynamic intransitive verbs such as 'inam-' (bend), the causative morpheme also introduces one more participant e.g.

(26a) Ciana nĩciainama.

The children have bent.

(26b) Mwarimũ nĩainam-ithi-a ciana.

The teacher has made/forced the children (to) bend.

In 26(b) a causer (Mwarimū) has been introduced and it is obligatory.

From the above sentences, it appears that the causative morpheme introduces an obligatory nominal that is not part of the sub-categorizational frame of the base verb. This therefore means that it has relevance to the syntax of a sentence hence leading us to the conclusion that according to this criterion, the morpheme is inflectional.

#### 2.3.4.2 THE PASSIVE

We begin by noting that the addition of the passive morpheme, -w-, changes the valency of all verb types. The examples below show this:-

(27a) Mũthuri nĩatema mũtĩ.

The man has cut the tree.

(27b) Mũtĩ nĩwatem-w-o (nĩ mũthuri).

The tree has been cut (by the man).

(28a) Mwana nĩamenya anja.

The child has known the answer.

(28b) Anja nĩyameny-w-o (nĩ mwana.)

The answer has been known (by the child.)

(29a) Nikwarakara andũ aingi.

There was annoyed many people/ Many people became annoyed.

(29b) Nīkwarakar-w-o (nī andū aingī).

There was annoyed many people/ Many people got annoyed

(30a) Nīkwainama ciana.

There has been bent by the children/ The children have bent.

(30b) Nīkwainam-w-o (nī ciana).

There has been bent (by the children)/ The children have bent.

All the (a) examples are active while the (b) ones are passive. The verb-root 'tem-' (cut) in (27) is dynamic transitive while 'meny-' (know) in (28) is stative transitive. 'Rakar-'(become annoyed) is stative intransitive while 'inam-' (bend) is dynamic intransitive. In all the four passive sentences, the verb valency has been reduced by one. In other words, where the active sentences need two participants as in 27(a) and 28(a), the passive counterparts need only one. 29(a) and 30(a) have only one participant which is then eliminated in the passivized 29(b) and 30(b). In sum, if the active sentence has X participants, its passive counterpart will have X-1 participants.

The passive morpheme has shown syntactic consequences and would therefore appear to be inflectional according to this criterion.

#### 2.3.4.3 THE APPLICATIVE

Like the causative, the applicative morpheme,  $\bar{r}$ -ir/er, also alters the sub-categorizational frame of the transitive verbs from being two- place to being three- place, for instance, as is seen in (31) and (32).

(31a) Mũthuuri nīatema mũtī.

The man has cut the tree.

(31b) Mũthuuri nīatem-er-a kahīi mũtī.

The man has cut the tree for the boy.

(32a) Mwarimũ nīamenya anja.

The teacher has known the answer.

(32b) Mwarimũ nīameny-er-a mwana anja.

The teacher has known the answer on behalf of the child.

In both 31(b) and 32(b), a new obligatory benefactive participant is introduced ('kahīi' and 'mwana' respectively).

(33a) Mwana nīarakara.

The child has become annoyed.

(33b) Mwana nīarakar-ir-a nyina.

The child has become annoyed with the mother.

(34a) Ciana nīciainama.

The children have bent.

(34b) Ciana n̄iciainam-ĩr-a mwarimũ.

The children have bent for the teacher.

From the stative (33) and the dynamic (34), we see that the valency of intransitive verbs changes after the addition of the applicative. In 33(b), an experiencer participant 'nyina'- (the mother) is introduced while in 34(b), a benefactive participant 'mwarimũ'- (teacher) is inserted. These two participants are obligatory otherwise ungrammaticality occurs.

Like the causative, the applicative morpheme alters the valency of any verb it attaches to by introducing one more obligatory participant. Thus, if the non-applied verb has X participant(s), the applied one has X+1. Since the ability to change the syntax is said to be an inflectional property, this morpheme appears inflectional according to this criterion.

#### 2.3.4.4 THE STATIVE

Both the stative morphemes (-k- and -ĩk/ek-) change the valency of transitive verbs. However, to minimise examples we shall only illustrate this point using the -ĩk/ek- stative which is actually the more basic of the two (see chapter 6 section 6.3).

(35a) Mwana n̄iatema m̄utĩ ũcio.

The child has cut that tree

(35b) M̄utĩ ũcio noūtem-ek-e .

The tree is cuttable .

(36a) Mwarimū niāmenya anja.

The teacher has known the answer.

(36b) Anja niyameny-ek-a .

The answer has been known.

As we can see, the root verbs 'tem-' (cut) in 35(a) and 'meny-' (know) in 36(a) require two nominals but after the addition of the stative in 35(b) and 36(b) they require only one. Hence, if the non-stative verb takes X participants, its stative counterpart takes X-1. This change in syntax is suggestive of inflectional status for the stative morpheme.

Among the intransitive verbs however, the stative does not appear to change the valency. This would suggest that the stative behaves like a derivational morpheme in such cases.

Consider:

(37a) Lazaro niariūka.

Lazaro has resurrected.

(37b) Lazaro niariūkika.

Lazaro has been resurrectable/possible to resurrect.

(38a) Ciana nīciehera.

The children have moved.

(38b) Ciana n̄iciehereka.

The children have been movable/ possible to move.

The non-stative verbs in 37(a) and 38(a) are one place just as those in 37(b) and 38(b) which have the stative morpheme. These results are conflicting since one type of verb alters the valency while another doesn't when the stative morpheme is applied. We thus conclude that the criterion of syntactic pertinence as applied to the stative is not helpful.

### 2.3.5 SUMMARY

From the foregoing analyses and remarks, the only two criteria that have provided uniform results across the four morphemes are productivity and regularity in meaning, according to which the morphemes are inflectional. The criteria of placement from the root and relevance to syntax have not provided conclusive results. However, the latter shows that the causative, the passive, the applicative and partly the stative, are inflectional. This is interesting given the typical assumption that the four morphemes are derivational cross-linguistically e.g Ashton, (1944), Gathenji,(1981), Loogman,(1965), Polome,(1967), Katamba, (1993). Unlike the other criteria, placement from the root confers derivational status to the causative, the passive, the stative and partly to the applicative.

In the face of Gikũyũ data, the criteria have largely yielded results that are contrary to expectation. It behoves us therefore, to examine the usefulness of these criteria. We do this in the next section.

## 2.4 AN EVALUATION OF THE CRITERIA FOR DISTINGUISHING BETWEEN INFLECTION AND DERIVATION

As we have already mentioned, the four morphemes are generally considered derivational in existing literature. Our results have, to a large extent, indicated the contrary. This vindicates Bauer's (1988) and Katamba's (1993) position that the criteria used are at best applicable to individual languages rather than cross-linguistically.

Perhaps this ambivalent situation can be attributed to the fact that the criteria themselves are inherently ambiguous. We review each of them below to explicate this fact.

### 2.4.1 PRODUCTIVITY

Bauer (Ibid.) and Katamba (Ibid.) note that there is no such thing as full productivity. In other words, there will always be idiosyncratic words that will fail to take up a given affix. *Morphemes are therefore said to range on a continuum of productivity from high to low.* In other words, how high is 'high' and how low is 'low'?

This point can be appreciated in our data in appendix A. Compared to the other three morphemes, the stative is the least productive. This has led some scholars like Baker (1988a) to consign it to the lexicon (as opposed to the other three which are said to be syntactic) supposedly because of its restricted occurrence (hence low or semi-productivity).

Since this low productivity is only relative to the productivity of the other three morphemes, we have chosen to go by the Relative Frequency Scale upon which each of the morphemes is rated. The results of such a test show that the stative is of high productivity hence inflectional.

There is also another equally delicate problem related to this. Productivity is seen in terms of the number of words that a given affix can possibly attach to.

There are two ways of looking at this. One, that high productivity only applies when an overwhelming number of the bases of a given word class takes a particular affix e.g. verbs taking tense. Two, that high productivity can still be achieved even where many exceptions exist provided that the said exceptions can be captured as predictable restrictions e.g. the stative affix can attach to all verbs except those denoting a naturally occurring state like dying and weather conditions. It could be argued that such verbs are ineligible for stativization due to blocking (blocking is a morphological process that may apply to curtail the occurrence of a word if its meaning already exists in another word.)

It is the latter view that we have taken in deciding to label the stative morpheme inflectional given its high productivity. Somebody taking the first option would most likely arrive at the reverse conclusion.

All this goes to show that the criterion of productivity is not reliable because it is largely dependent on the kind of data one uses, the interpretation of productivity scores, and whether one takes a narrow or broad view of high productivity.

## **2.4.2 REGULARITY IN MEANING**

Concerning regularity in meaning, the issue becomes one of degrees. That is, can one predict the meanings of the four morphemes with equal ease? In chapter three, we saw, for example, that the respective meanings of the passive and the stative morphemes are fairly straightforward and do not depend on extraneous factors such as verb type and syntactic placements as is the case with the causative and the applicative. These latter two are associated with multiple meanings while the former only have one. It is possible therefore

to equate multiple meanings to irregularity. Bauer (1988) observes that in English for instance, the suffix '-age' can be considered irregular in meaning because it can be taken as 'an instance' of the verb e.g. break-breakage or as 'a collection' of the noun e.g. mile-mileage.

In our work, we have not subscribed to this view. Rather, we have coupled regularity with predictability. This means that if a morpheme has multiple meanings but the occurrence of each can be predicted, (say according to the syntactic environment or verb type) then such an affix we consider regular in meaning hence inflectional.

We can see therefore that one can arrive at different results with the same morpheme depending on their interpretation of 'regularity in meaning'.

### 2.4.3 PLACEMENT RELATIVE TO THE ROOT

The third criterion concerns placement of an affix relative to the root. Although the problem with this particular criterion does not affect our analysis, it is still worth mentioning for the sake of those who might be looking at the concatenation of various 'derivational' morphemes. Take a word like :

'hūrithanīka' -

hūr-ith-an-~~θ~~-ik-a

beat-caus-rec-caus-stat-fv

(can be made to collide)

The three morphemes here, namely the causative, the reciprocal and the stative, are said to be derivational. If we go by proximity to the root, then only the causative would be

derivational. The stative on the other hand would be inflectional. What then would be said about the medially positioned reciprocal? This makes for an awkward situation.

Even in cases devoid of such co-occurrences, the criterion is still problematic. In our work, we have seen it give contradictory results when the applicative is juxtaposed with aspect. Recall that the perfect aspect appears outside the applicative affix thus suggesting that the former is inflectional and the latter derivational. On the other hand, the imperfect aspect is placed adjacent to the root and the applicative affix on the periphery. The implication of this is that the imperfect aspect is derivational and the applicative morpheme inflectional.

This is equivalent to saying for instance, that the present tense is inflectional and the past tense derivational and yet we are dealing with the same grammatical category albeit with two different temporal references. We find such a conclusion untenable and therefore dismiss the criterion as unreliable.

#### **2.4.4 RELEVANCE TO SYNTAX**

Again this criterion raises the thorny issue of interpretation as Bauer (1988:84-85) notes. In one sense, relevance to syntax, which is said to be an inflectional feature, can mean 'what marks agreement'. However, this would be too restrictive because it would work for number but not for tense, yet both are considered inflectional. In another sense, relevance to syntax could simply mean 'what has an effect on syntax' in terms of valency expansion or reduction.

In our work, we have adopted this latter view because it is broader and therefore more accommodating. Besides, the four morphemes that concern us would be excluded by the first sense since they are not concordial. The fact that our results have shown that the four morphemes are relevant to syntax (hence inflectional) despite being considered derivational in

some languages, suggests that the criterion can not be relied upon to give uniform results.

## 2.5 CONCLUSION

Given that the four criteria do not show conclusive results, the question that naturally arises is whether or not the distinction between inflectional and derivational morphemes is worth making. We submit that it is necessary indeed especially for lexicographical reasons. This is because it would not be practicable to make dictionary entries of all the forms of a word. For example, the difference between two tense or aspect forms has fewer syntactic and semantic ramifications compared to that between a root-verb and a derived one. It is only logical therefore, to give entry status to verbal extensions rather than aspect forms. From our data, three parameters seem to set apart the verbal extensions (GFC morphemes) from the aspectual ones. These are:

- (1) (1) The verbal extensions typically appear inside aspect morphemes when the two are juxtaposed.
- (2) The verbal extensions alter the valency structure of the host verbs by either reducing or increasing it. For example, an intransitive verb ends up being monotransitive after the affixation of the causative. Aspect has no such consequences.
- (3) Unlike aspect and tense forms, the verbal extensions effect a substantive change in meaning to their host verbs. For instance, `ruḡaʹ-(cook) is significantly different from `ruḡ-īr-aʹ-(cook for/at). This is in contrast to the marking of aspect e.g. `ruḡaʹ-(cook) and `ruḡ-ag-aʹ-(cooks).

We would therefore suggest that in Gikūyū, the above three characteristics typify derivational morphemes (hence entry status). Whether or not this claim has cross-linguistic merit is a matter for further research.

## CHAPTER 3

### THE APPLICATIVE CONSTRUCTION

#### 3.0 : INTRODUCTION

We begin the chapter by providing a description of the types of applicative constructions possible in Gikūyū. We have based these types on verb categories. In the course of the description we discuss the semantic function/ role of the nominal introduced by the applied affix when attached to these verb categories. Finally, we have analysed the applicative structures observed using the Merger Theory and the Incorporation Theory.

#### 3.1 THE APPLICATIVE CONSTRUCTION IN GIKUYU

As was mentioned in chapter 2, the applicative affix in Gikūyū is either  $\text{-}\bar{\text{r}}$  or  $\text{-er-}$ . The distribution of the two is determined by the vowel in the last syllable of the verb- root or stem. If this vowel is 'a', 'i', 'ī', 'u' or 'ū', then the applied affix is  $\text{-}\bar{\text{r}}$ . If the vowel is 'e' or 'o' then the applicative is  $\text{-er-}$  as shown in the following examples:

- 1(a) Haat-a (sweep) - haat- $\bar{\text{r}}$ -a (sweep for/at)  
 (b) Hith-a (hide) - hith- $\bar{\text{r}}$ -a (hide for/ at/ from)  
 (c) Hīt-a (hunt) - hīt- $\bar{\text{r}}$ -a (hunt for /at)

- (d) Rut-a (remove/teach) - rut-īr-a (remove/teach for/at)
- (e) Gūth-a (hit) - gūth-īr-a (hit for/ at)
- (f) Root-a (dream) - root-er-a (dream for /at)
- (g) Ken-a (rejoice) - ken-er-a (rejoice about/at)

In chapter 2, we also saw that the applied affix is highly productive especially with the locative meaning. That is, virtually all verbs regardless of type can host it. We now look at the number of applicative nominals taken by each verb type and the semantic roles associated with such nominals.

### 3.1.1 ZERO VALENCY (ARGUMENTLESS) VERBS.

In Gikūyū, zero-valency verbs invariably denote weather conditions (hence 'weather verbs', a term adopted from Kioko (1994), and can be used without any thematic nominal. For instance, the verb 'ura'- (rain) in example 2(a) below is meaningful without any argument. The subject agreement is that of an expletive (class17). These verbs can however take cognate<sup>1</sup> nominals which may be realized either pre-verbally or post-verbally as can be seen in examples 2(b) and 2(c) respectively.

(2a) Nīkwaura.

Nī-kū-a-ur-a

Foc-expl-tns-rain-fv

It has rained.

(2b) Mbura nīyaura.

Mbura nī-ī-a-ur-a.

Rain foc-sub-tns-rain-fv.

Rain has fallen.

(2c) Nīkwaura mbura

Nī-kū-a-ur-a mbura

Foc-expl-tns-rain-fv rain

It has rained (rain)

In 2(b) and 2(c) the cognate nominal is 'mbura' (rain). The meaning of these two examples is the same as that of 2(a) in which a cognate nominal is totally lacking. This implies that the verb 'ura'-(rain) doesn't subcategorize for any argument. Other such verbs are: 'kīa'-(dawn or stop raining), 'tuka'-(become dark).

When we affix the applied morpheme to such verbs, an extra argument is overtly introduced as shown below:

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<sup>1</sup> A cognate nominal is one whose meaning is closely related to the meaning of a verb and in most cases is

- (3a) Mbura īyo nīyaurīra andū aingī  
 Mbura īyo nī-ī-a-ur-īr-a andū aingī  
 Rain that foc-sub-tns-rain-app-fv people many  
 That rain has fallen on many people

- (3b) \*Mbura īyo nīyaura andū aingī  
 Mbura īyo nī-ī-a-ur-a andū aingī  
 Rain that foc-sub-tns-rain-fv people many  
 That rain has rained many people

- (4a) Mbura īyo nīyaurīra handū heega  
 Mbura īyo nī-ī-a-ur-īr-a handū heega  
 Rain that foc-sub-tns rain-app-fv place good  
 That rain has rained at a good time.

- (4b) \*Mbura īyo nīyaura handū heega  
 Mbura īyo nī-ī-a-ur-a handū heega  
 Rain that foc-sub-tns-rain-fv place good  
 That rain has fallen right time

(5a) Mbura nīyakīā

Mbura nī-ī-a-kī-a

Rain foc-sub-tns-stop raining-fv

The rain has stopped raining.

(5b) Nīgwakīā

Nī-kū-a-kī-a

Foc-expl-tns-dawn/stop raining-fv

(i) It has dawned

(ii) It has stopped raining

(5c) Mbura yakiīra handū hooru

Mbura ī-a-kī-īr-a handū hooru

Rain sub-tns-stop raining-app-fv place bad

The rain has stopped raining at the wrong time

(5d) \*Mbura nīyakīā handū hooru

Mbura nī-ī-a-kī-a handū hooru

Rain foc-sub-tns-stop-raining-fv-place bad

The rain has stopped raining wrong time.

(6a) Gūgakīra njīra<sup>2</sup>

Kū-ka-kī-īr-a njīra

Expl-tns-dawn-app-fv on the way

It will dawn while ( we are) on the way

(6b) \*Gūgakīa njīra

Kū-ka-kī-a njīra

Expl-tns-dawn-fv on the way

It will dawn way

In 3(a) above, the applied affix brings in the theme, 'andū aingī' – (many people) while in 4(a) and 5(c), a temporal locative 'handu heega/hooru' – (right/wrong time respectively) is introduced. The ill-formed 3(b), 4(b) and 5(d) serve to prove that the theme and the locative arguments are not part of the basic argument structure of the verbs in question and therefore their occurrence is motivated by the applicative process.

6(a) is interesting in that the affix introduces two arguments; one overt and the other covert. The spatial locative 'njīra'-(way) is syntactically present but the implied theme (the people whom dawn will find on the way) is not. Despite the absence of a marker for this covert argument, we know that it is presupposed because 6(a) is semantically equivalent to the

<sup>2</sup> Nouns that inherently denote location may not take the event localizer '-inī' (in/at) when they refer to a general place e.g. Ndamūtiga njīra (I left him on the way), '-inī' is however inserted when reference is to a particular position or place e.g. Ndamūtiga njīrainī (I left him on ) at the path).

underived 'Gūgakīā andū me njīra'- (It will dawn while people are on the way), which has the arguments 'andū'- (people) and 'njīra'-(on the way). The unacceptable 6(b) indicates that the said arguments are a product of the applicative process.

From these examples, we can conclude that the applied affix changes zero-valency verbs into one-place or sometimes two-place verbs whose arguments are invariably themes or locatives (either spatial or temporal).

### 3.1.2 INTRANSITIVE VERBS

The applied affix is capable of introducing four different arguments when attached to intransitive verbs such as the one in 7(a). These arguments are: (1) a locative (2) the possessor or indirect beneficiary/maleficiary (3) the possessed or direct beneficiary/maleficiary and (4) a motive. Consider the following examples in which we introduce the possible arguments one by one.

- (7a) Kaana nīgathiī (ndukainī)  
 Kaana nī-ka-a-thiī-∅ (ndukainī)  
 Child foc-sub-tns-go-fv (to the shop)  
 The child has gone (to the shop)

- 7(b) Kaana nĩgathiĩra ndukainĩ  
 Kaana nĩ-ka-a-thiĩ-ĩr-a ndukainĩ  
 Child foc-sub-tns-go-app-fv at the shop  
 The child has gone through the shop/ while at the shop

In 7(a), the verb has taken an optional non-applied locative nominal 'ndukainĩ' - (to the shop). 7(b) contains the spatial locative 'ndukainĩ' - (at the shop). Significantly, the locative in 4(a) is different from the one in 7(b) because the former is part of the basic verb while the latter is applied. Also, while the former means 'to the shop', the latter means 'through the shop' or 'while at the shop'. Yet another difference between the two is that 'ndukainĩ' in 7(a) can be replaced by 'nduka' - (shop) while that in 7(b) cannot. The significance of this is that 'nduka' or 'ndukainĩ' in 7(a) denotes more of an 'adverbial of place' meaning than the prepositional one denoted by the locative in 7(b) - note that the applicative is alternatively called the prepositional morpheme. The verb 'thiĩ' - (go) is therefore capable of taking two types of locative nominals: an optional non-applied one, and an obligatory applied one.

Further examples of the kind of nominals the applied affix is associated with follow.

- (7c) Kaana nĩgathiĩra Mwangi ndukainĩ  
 Kaana nĩ-ka-a-thiĩ-ĩr-a Mwangi ndukainĩ  
 Child foc-sub-tns-go-app-fv Mwangi at the shop  
 The child has gone to the shop for Mwangi

- (7d) Kaana nīgathiīra Mwangi mwarī ndukainī  
 Kaana nī-ka-a-thiī-īr-a Mwangi mwarī ndukainī  
 Child foc-sub-tns-go-app-fv Mwangi daughter at the shop  
 The child has gone to the shop for Mwangi's daughter

- (7e) Kaana nīgathiīra Mwangi mwarī ndukainī gītīo  
 Kana nī-ka-a-thiī-īr-a Mwangi mwarī ndukainī gītīo  
 Child foc-sub-tns-go-app-fv Mwangi daughter at the shop respect.  
 The child has gone to the shop for Mwangi's daughter because of the respect.

In 7(c), (derived from 7a) the benefactive argument 'Mwangi' has been introduced – it is benefactive because Mwangi benefits from the action of going to the shop done by the child. The newly introduced argument in 7(d) is 'mwarī'- (Mwangi's daughter). This makes 'Mwangi' a possessor and 'mwarī' the possessed by virtue of the filial relationship that obtains between them. It is also possible to view this sentence as having two benefactive arguments one of which is direct (mwarī-daughter) and the other indirect (Mwangi). That is, when his daughter benefits, Mwangi also benefits by extension. Finally, 7(e) introduces 'gītīo'- (respect) which is a motive argument that gives the reason of the child's going to the shop.

Thus, an intransitive verb such as 'thiĩ' - (go) takes up to three applied nominals in a sequence as is seen in 7(e). These are: Mwangi, 'mwaĩĩ' - (daughter) and 'gĩĩĩ' - (respect).

From 7(b) however, we see that when it takes the applied locative, no other argument, applied or otherwise, is allowed. Other intransitive verbs that behave similarly include: 'ũka' - (come), teng'era- (run), 'negaĩ' - (make noise) etc.

Something worth noting is that, although the non-applied locative in 7(a) is optional, it becomes obligatory after the introduction of the applied arguments. This can be illustrated by 7(c), 7(d) and 7(e) that would be unacceptable without the locative (unless this locative is understood from previous or subsequent discourse).

### 3.1.3 MONOTRANSITIVE VERBS

When the applied affix is added to monotransitive verbs, it can introduce up to four applied arguments as was the case with intransitives. This is systematically instantiated below:

- (8a) Wawerũ nĩatinia mũgate  
 Wawerũ nĩ-a-a-tin-i-a mũgate  
 Wawerũ foc-sub-tns-cut-caus-fv bread  
 Wawerũ has cut the bread.

(8b) Wawerũ atinĩria mūtumia mūgate

Wawerũ a-a-tin-ĩr-i-a mūtumia mūgate

Wawerũ sub-tns-cut app-caus-fv woman bread

Wawerũ has cut bread for the woman.

(8c) Wawerũ atinĩria mūtumia kaana mūgate

Wawerũ a-a-tin-ĩr-i-a mūtumia kaana mūgate

Wawerũ sub-tns-cut-app-caus-fv woman child bread.

(i) Wawerũ has cut bread for the woman's child

(ii) Wawerũ has cut bread for the child on behalf of the woman.

(8d) Wawerũ atinĩria mūtumia kaana mūgate njĩrainĩ

Wawerũ a-a-tin-ĩr-i-a mūtumia kaana mūgate njĩrainĩ

Wawerũ sub-tns-cut-app-caus-fv woman child bread at the path.

(i) Wawerũ has cut bread for the woman's child while at the path

(ii) Wawerũ has cut bread for the child on behalf of the woman while at the path

(8e) Wawerũ atinĩria mūtumia kaana mūgate njĩrainĩ thoni

Wawerũ a-a-tin-ĩr-i-a mūtumia kaana mūgate njĩrainĩ thoni

Wawerũ sub-tns-cut-app-caus-fv woman child bread at the path embarrassment.

- (i) Wawerũ has cut bread for the woman's child while at the path because of embarrassment.
- (ii) Wawerũ has cut bread for the child on behalf of the woman while at the path because of embarrassment.

The non-applicative 8(a) subcategorizes for the theme argument (mũgate –bread).

After the applied affix is attached in 8(b), the benefactive 'mũtumia' – (woman) is introduced.

8(c) adds a possessed or direct beneficiary (kaana-child). In 8(d) another argument, the spatial locative 'njĩrai-nĩ' - (at the path), is added while in 8(e) the motive 'thoni' (embarrassment) is the latest addition.

An important fact to note here is that the order of the post-verbal nominals where more than one occurs is fixed<sup>3</sup>. Not even the locative and the motive arguments in 8(e) can be interchanged as is the case in kikamba (Kioko, 1994:300) without resulting in ill-formedness e.g.

(8e) \*Wawerũ atinĩria mũtumia kaana mũgate thoni njĩrainĩ

Wawerũ a-a-tin-ĩr-i-a mũtumia kaana mũgate thoni njĩrainĩ

Wawerũ sub-tns-cut-app-caus-fv woman child bread embarrassment at the path.

Wawerũ has cut bread for the woman's child because of embarrassment.

while at the path

<sup>3</sup> 'Mũtumia' and 'kaana' in 8(d) and 8(e) can change places in the unlikely circumstances where the child possesses the woman e.g. as a slave or if it was the child's responsibility to cut the bread.

When a monotransitive verb such as 'cina' -(burn) is derived, it could introduce an applied nominal whose semantic role is malefactive e.g.

(8a) Míkora nīyacina nyũmba

Míkora nī-ĩ-a-cin-a nyũmba

Thugs/arsonists foc-sub-tns-burn-fv house/houses

The thugs/arsonists have burned the house/houses

(9b) Míkora nīyacinĩra andũ nyũmba<sup>4</sup>

Míkora nī-ĩ-a-cin-ĩr-a andũ nyũmba

Thugs/arsonists foc-sub-tns-burn-app-fv people house

The thugs/arsonists have burned peoples' houses.

In 9(b) above, those whose house/houses was/were burned were negatively affected and therefore count as malefactors.

<sup>4</sup> While some languages such as kichaga (Moshi, 1998) can accommodate an instrumental applied argument in sentences such as 9(b) through 9(e) and 10(b), Gikuyu cannot.

### 3.1.4 DITRANSITIVE VERBS

A ditransitive base verb can take on three extra arguments after the affixation of the applied suffix. Examples are given below:

(10a) Kihiī nīgīatunya kairītu ibuku

Kihiī nī-kī̄-a-tuny-a kairītu ibuku

Boy foc-sub-tns-snatch-fv girl book

The boy has snatched the book from the girl

(10b) Kihiī nīgīatunyīra mwarimū kairītu ibuku

Kihiī nī-kī̄-a-tuny-īr-a mwarimū kairītu ibuku

Boy foc-sub-tns-snatch-app-fv teacher girl book.

(i) The boy has snatched the book from the teacher's girl (daughter).

(ii) The boy has snatched the book from the girl on behalf of the teacher.

(10c) Kihiī nīgīatunyīra mwarimū kairītu ibuku kīwanja

Kihiī nī-kī̄-a-tuny-īr-a mwarimū kairītu ibuku kīwanja

Boy foc-sub-tns-snatch-app-fv teacher girl book field

(i) The boy has snatched the book from the teacher's girl while in the field.

(ii) The boy has snatched the book from the girl on behalf of the teacher in the field.

(10d) Kīhīĩ ġiatunyīra mwarimū kairītu ibuku kīwanja ruo.

Kīhīĩ kī-a-tuny-īr-a mwarimū kairītu ibuku kīwanja ruo

Boy sub-tns-snatch-app-fv teacher girl book field bitterness

- (i) The boy has snatched the book from the teacher's girl while in the field because of bitterness.
- (i) The boy has snatched the book from the girl on behalf of the teacher while in the field because of bitterness.

In 10(b), the applied nominal 'mwarimū' – (teacher), could be read as either a benefactive or a malefactive. The former is the case in the interpretation that the book was snatched on behalf of the teacher. The latter implies that the teacher is a possessor of the girl and therefore is adversely but indirectly affected by the snatching of the book from the girl. 10(c) brings in the spatial locative 'kīwanja' - (in the field) denoting where the action of snatching took place. Finally 10(d) introduces the motive 'ruo' – (bitterness) which provides the reason for the snatching.

Where underived ditransitive verbs appear with a locative noun, the applied affix can only add two other arguments e.g.

(11a) Mwarimū nīatuma mūrutwo ibuku ndukainī

Mwarimū nī-a-a-tum-a mūrutwo ibuku ndukainī.

Teacher foc-sub-tns-send-fv pupil book at the shop

The teacher has sent the pupil for a book at the shop

(11b) Mwarimũ niātũmĩra kamau mũrutwo ibuku ndukainĩ

Mwarimũ nĩ-a-a-tũm-ĩr-a kamau mũrutwo ibuku ndukainĩ

Teacher foc-sub-tns-send-app-fv Kamau pupil at the shop.

The teacher has sent the student for a book at the shop for the benefit of Kamau

(11c) Mwarimũ atũmĩra Kamau mũrutwo ibuku ndukainĩ thiina

Mwarimũ a-a-tũm-ĩr-a Kamau mũrutwo ibuku ndukainĩ thiina

Teacher sub-tns-send-app-fv Kamau pupil book at the shop lack of an alternative.

The teacher has sent the student for a book at the shop for the benefit of Kamau for lack of an alternative.

The underived 11(a) has a recipient <sup>5</sup>. In 11(b) and 11(c), all the arguments in 11(a) retain their thematic roles but, in addition, a new argument is added in each construction. These are the beneficiary, (Kamau) in 11(b) and the motive 'thiina'<sup>6</sup> (lack of an alternative) in 11(c).

<sup>5</sup> Recipient in the sense that the student receives the message from the teacher and the book from the shopkeeper.

<sup>6</sup> This can also be interpreted to mean 'poverty' but the appropriate sense here is the default one provided.

This far, we have seen that derived zero valency verbs take one overtly expressed applied argument that is either a locative or a theme. Intransitive and monotransitive verbs are associated with up to three applied nominals whose semantic roles range from the benefactive/malefactive, the locative to the motive. Ditransitive verbs are capable of taking benefactive/malefactive, locative and motive applied arguments.

Let us note here that despite the introduction of a chain of applied nominals, only one applied affix is used on the verb. In other words, the number of applied nominals is not congruent to the number of applied affixes. However, like Moshi (1998:139), we shall assume that each applied argument is actually introduced by an applied affix but owing to the fact that these affixes are all morphologically identical, some form of deletion takes place leaving behind only one applied affix irrespective of the number of applied nominals present. This contrasts sharply with Kikamba where up to three applied affixes can appear on verbs that take three or four applied arguments (Kioko, 1994:299-300). We shall take up this issue in section 3.4.2 in order to shed light on constructions that seemingly have more than one 'applied' affix.

Having described the range of applicative constructions possible in Gikuyu, we now apply ourselves to explaining these same constructions theoretically beginning with the Merger Theory (Marantz, 1984).

### 3.2.0 THE MERGER THEORY (MARANTZ, 1984) – AN OVERVIEW

Basically, the Merger Theory postulates that there are three levels of language analysis:

These are:

- a) L-S (Logical semantics)
- b) S (Syntactic structure)
- c) Surface structure

In addition to these levels, there is a lexicon of roots and affixes. These affixes are treated as lexical items with their own entries that provide information regarding their argument<sup>7</sup> structure. For example, the transitivity status of a lexical item is provided as being either [+transitive] or [-transitive].

The purpose of the L-S level is to display semantic roles such as agent, goal etc. and to impose the necessary constraints on the distribution of these roles. For example, each argument receives one and only one theta/semantic role. This means that a given argument cannot serve as the agent and theme of a lexical item at the same time as this would violate the Theta-Criterion which states that each argument should be theta-identified (marked) with only one theta role. (Chomsky, 1981 and 1982).

At the S level, syntactic roles that correspond to the theta roles at L-S are assigned.

These syntactic roles are: subject of a predicate, direct object of the verb, second object of the

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<sup>7</sup> An argument is an individual, entity or item about which a predicate says something

verb, object of a preposition etc. A verb that assigns an objective syntactic role must be marked [+transitive].

The surface structure provides the phonological output where elements are linearly ordered into terminal strings.

Although the three levels are constructed independently, they are related to each other by a mapping principle that ensures that grammatical relations are preserved from one level to another automatically. In other words, the mapping principles determine the elements that will correspond to each other at the different levels. To illustrate, an argument might be labeled 'agent' at L-S, 'subject' at S level and 'the boy' at surface structure.

If two lexical items (e.g. verb and affix) in one level of representation correspond to a single item in another level, morphological Merger is said to have occurred. Merger is conceptualized thus:

When X and Y merge, the argument structure of the derived word X + Y is the argument structure of X applied to the argument structure of Y, or to Y itself, or the argument structure of Y applied to the argument structure of X, or to X itself (Marantz 1984:227).

This simply means that the derived verb will reflect both the argument structure of the root verb and that of the affix. This definition is pertinent to grammatical function changing

processes like the applicative, the causative, the passive etc. Let us now examine how it applies to the applicative morpheme.

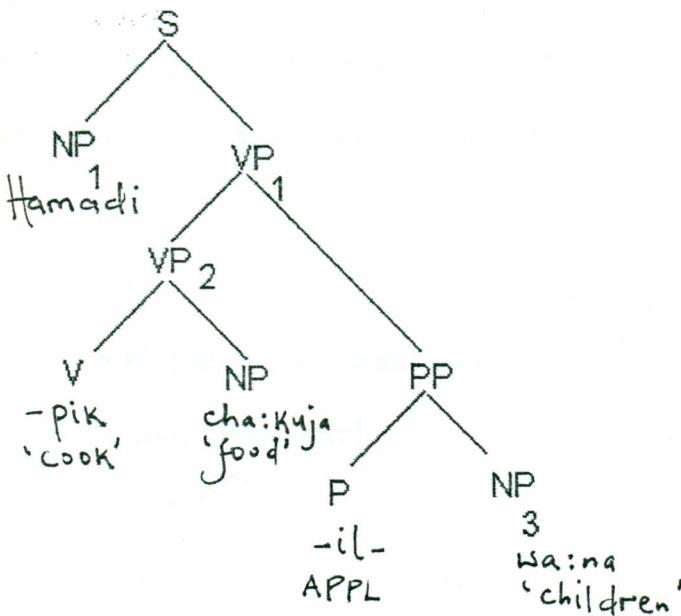
### 3.2.1 THE APPLICATIVE CONSTRUCTION WITHIN THE MERGER THEORY

Basing his analysis on Chimwiini (a Bantu language spoken in Somali), Marantz (1984:171) observes that the applied affix introduces benefactive/malefactive, goal, instrumental and source arguments to the basic structure of an underived verb.

Marantz considers the applied affix an independent L-S constituent with the entailment that it has its own entry and argument structure. The lexical entry of the applied morpheme will indicate that it is an affix and therefore must attach to a verb at some level of syntactic analysis (Thus it would merge with the verb). It will also indicate that the affix is transitive and is capable of theta-marking the argument it introduces.

The root verb is also endowed with an entry and an argument structure. Since the verb is an independent morpheme, it doesn't attach to anything and may be transitive or intransitive. If the former is the case, then the verb must confer a semantic role upon its object. On the other hand, an intransitive verb has no role to assign. The theory further argues that when the applied morpheme introduces an argument other than the

instrumental<sup>8</sup>, then the merger of the root verb and the affix takes place at L-S. The following pre-merger structure is envisaged Chimwiini.



(Marantz, 1984: 232)

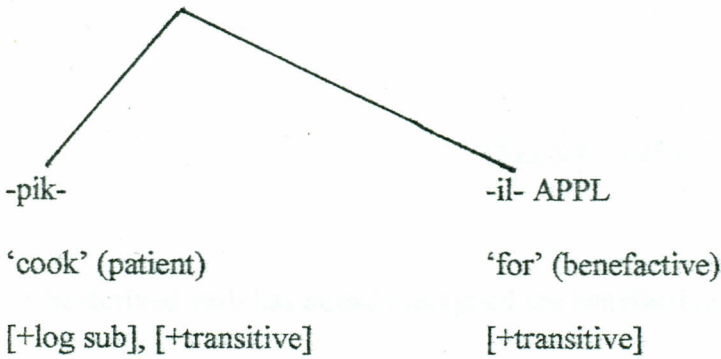
Here, the root verb '-pik-' (cook) is transitive and therefore takes an object ('cha:kuja'-food). The applied affix '-il-' also takes its own object ('wa:na'-children). The root verb assigns the patient role to its object while the affix assigns the benefactive role to its object. The logic behind this is that in an asymmetrical language like Chi-Mwini, the verb can only assign one semantic role to an argument meaning that '-pik' (cook) cannot theta-mark the two objects in the sentence.

When merger takes place, the argument structure of the root verb and that of the applied affix combine to form the argument structure of the derived verb. Consequently, the derived verb will now have two objects, one direct and the other indirect. What determines the status of these objects is the Feature Percolation Principle. Feature percolation occurs when a lexical item passes on its category features to the entire derived word. By principle, the features of the affix will typically supercede those of the root verb and hence become the features of the derived verb as is shown below:

-pik- il-

('cook' (patient) 'for' (benefactive))

[+log sub], [+transitive]

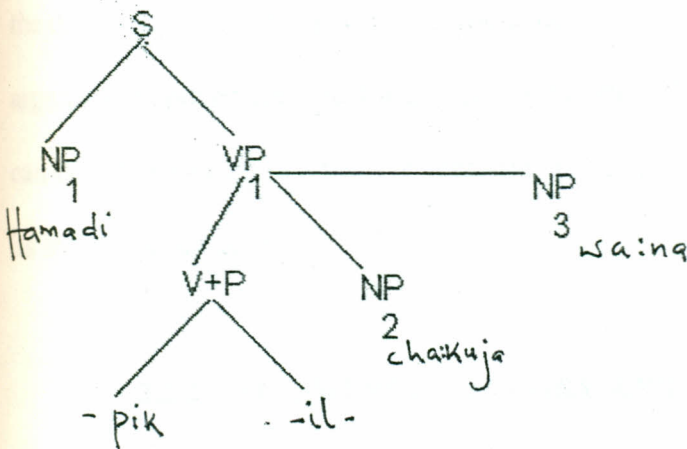


(Marantz, 1984: 233)

Above, we see that the (+transitive) feature of the affix together with the semantic role it assigns (benefactive) have now percolated to become features of the derived verb. 'wa:na'-

<sup>8</sup> However, it takes place at S level for instrumentals).

(children) is therefore a direct argument and semantic role assignee of the derived verb<sup>9</sup>. The above merger will produce the diagram below:



(Marantz, 1984: 234)

Since the derived verb has already assigned the benefactive role to 'wa:na'-(children) it is incapable of theta-marking the argument 'cha:kuja'-(food) as well. The root verb, which initially assigned the patient role to this argument, can no longer do so after merger because its semantic role assigning capacity has been overtaken by that of the affix (because of Feature Percolation). This patient role is now said to be assigned structurally by the [NP, VP}

<sup>9</sup>The direct argument of a lexical item is the argument it assigns a semantic role. Normally, this argument corresponds to the direct object position which the theory calls OBJ.

position (object position). This position is inherently associated with the patient and theme roles and therefore may assign such a role if no lexical assignor is available.<sup>10</sup>

Of necessity, the direct argument and role assignee of the derived verb must precede the indirect argument which is structurally theta-marked. Recall that the former corresponds to the direct object whose typical position is next to the verb. Evidence that the benefactive argument is indeed the direct argument of the applied verb is said to come from the fact that it can be subjectivized in a passive sentence, and can also mark object agreement. This is unlike its indirect counterpart.

### 3.2.2 THE MERGER THEORY AND THE GIKUYU APPLICATIVE

Having looked at the mechanics of the Merger Theory in relation to the applicative construction, we now use it as an explanatory tool for the Gikūyū applicative. Our starting point is the zero-valency verbs. The following examples are repeated for illustration:

- (12a) Nīgwakīa  
 Nī-kū-a-kī-a  
 Foc-expl-tns-dawn-fv  
 It has dawned

<sup>10</sup> This is roughly equivalent to inherent case assignment in related theories such as Baker (1988a,b).

(12b) Gūgākīra njīra

Kū-ka-kī-īr-a njīra

Expl-tns-dawn-app-fv on the way

It will dawn while we are on the way

(12c) \*Gūgākīa njīra

Kū-ka-kī-a njīra

Expl-tns-dawn-fv way

It will dawn way.

The applied affix has introduced two arguments in 12(b) as earlier noted in example 6(a) in this chapter. These are the spatial locative 'njīra' - (on the way) and the theme (the people dawn will find on the way) which is only implied and therefore covert. Theoretically, the situation here is complicated. For one, the theory is silent on locative roles. Secondly, one applied affix is associated with two arguments. Now, we have already seen that the derived verb theta-marks the argument introduced by the applied affix. In an asymmetrical language like Gīkūyū,<sup>11</sup> we now have a situation in which there is one role assignor (the applied affix and subsequently the derived verb) but two applied nominals in need of semantic roles. This is untenable in the theory.

<sup>11</sup> See section 3.4.2 for evidence that Gīkūyū is asymmetrical.

Supposing it is argued that the derived verb could assign the locative role while the [NP,VP] position assigns the theme role it is associated with. The problem then would be that, as the direct argument, the locative would precede the theme. This configuration would be disallowed in Gikūyū<sup>12</sup>.

Besides, direct arguments are expected to undergo subjectivization in a passive construction and to cliticize. Neither of these two stipulations is possible with the above example. Hence:

(12d) \*Njīra nīgakīrwo

Njīra nī-ī-ka-kī-īr-w-o

Way foc-sub-tns-dawn-app-pas-fv

On the way it will be dawned

(12e) \*Gūkamīkīra

Kū-ka-mī-kī-īr-a

Expl-tns-op(it-road)-dawn

It will dawn for it.

With another zero-valency verb, 'ura'-(rain) in this case, the situation becomes even more complicated for the theory. Consider:

- (13a) Mbura nīyaura  
 Mbura nī-ī-a-ur-a  
 Rain foc-sub-tns-rain-fv  
 Rain has rained
- (13b) Mbura īyo nī yaurīra andū aingī.  
 Mbura īyo nī-ī-a-ur-a andū aingī  
 Rain that ofc-sub-tns-rain-app-fv people many.  
 That rain has rained on many people
- (13c) \*Mbura īyo nīyaura andū aingī  
 Mbura īyo nī-ī-a-ur-a andū aingī  
 Rain that foc-sub-tns-rain-fv people many.  
 That rain has rained many people.

We assume that the applied argument 'andū aingī' - (many people) in 13(b) bears the semantic role of theme given that it experiences the state denoted by the verb. (This is characteristic of theme (Katamba, 1993:257). This argument is obviously associated with the applied affix as can be seen from the ill-formed 13(c). We therefore expect it to be theta-marked by the affix and thereafter by the derived verb. However, according to theory, the

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<sup>12</sup> We cannot give evidence of such an ill-formed sentence since the theme is covert. However, studies have

theme role is inherently assigned by the [NP,VP] position and not by the applied affix. Here is a situation whereby there are two theta-assignors competing to assign one role in blatant contravention of the One Role/ One Role Assignor Principle stipulated by the same theory (Marantz,1984:22)

Probably, Marantz's reply to this ambivalence would be to analyze the argument in question as a goal rather than a theme. We arrive at this assumption by analogy since in the sentence, 'The tree fell on the teacher', he considers 'the teacher' a goal (Ibid. :236)- according to Bresnan and Moshi (1988), 'the teacher' could be interpreted as an experiencer. In that vein, the goal role would be assigned by the applied affix first and then by the derived verb. Predictably, this argument will bear direct object features as indicated below:

- (13d) Andū aingī nīmaurīrwo (nī mbura īyo)  
 Andū aingī nī-ma-a-ur-īr-w-o (nī mbura īyo)  
 People many foc-sub-tns-rain-app-pas-fv (by rain that)  
 Many people have been rained on (by that rain)
- (13e) Mbura īyo nīyamaurīra  
 Mbura īyo nī-ī-a-ma-ur-īr-a  
 Rain that foc-sub-tns-op(them-people)-rain-app-fv

---

shown that themes precede locatives in Bantu e.g. Bresnan and Moshi (1988).

That rain has rained on them.

In the passive 13(d), the goal is the subject while in 13(e) it marks agreement with the verb. Therefore, whether the theory holds or not for examples such as (13), appears to depend on the role accorded to 'andū aingī' - (many people). When taken as a goal, the theory adequately explains it but not when it is assumed to be a theme.

Concerning intransitive verbs, the theory provides an adequate account especially where the applied argument introduced bears a benefactive/makefactive role. e.g

(14a) Ciana nīcianegena

Ciana nī-ci-a-negen-a

Children foc-sub-tns-make noise-fv

The children have made noise

(14b) Ciana nīcianegera mūrwaru

Ciana nī-ci-a-negen-er-a mūrwaru

Children foc-sub-tns-make noise-app-fv sick person

The children have made noise for the sick person.

In 14(b), the derived verb will assign the argument 'mūrwaru'- (sick person) the malefactive role after inheriting it from the affix.

The theory however doesn't envisage an example such as 15 below:

(15a) Kaana nīgathiī (ndukainī̄)

Kaana nī̄-ka-a-thiī-∅ (ndukainī̄)

Child foc-sub-tns-go-fv (to the shop)

The child has gone (to the shop)

(15b) Kaana nīgathiī̄ra ndukainī̄

Kaana nī̄-ka-a-thi-ī̄-a ndukainī̄

Child foc-sub-tns-go-app-fv at the shop

The child has gone through the shop/ while at the shop

As earlier noted, no mention is made of applied locative arguments in the theory and clearly 'ndukainī̄'- (through/ while at the shop) in 15(b) is one (Recall that the one in 15(a) is optional and non-applied and therefore does not count as an argument). The sentence in 12(a) is well-formed without the locative but after the introduction of the applied affix, the locative becomes obligatory and hence an argument of the derived verb. As an argument, it needs to be assigned a semantic role. Again, we shall extend the theory by assuming that the affix can indeed assign a locative role to its locative argument in which case 15(b) will be catered for.

Monotransitive verbs also present no problems provided the applied affix attached to them introduces only one argument e.g.

(16a) Mwangi nīathooma marūa

Mwangi nī-a-a-thoom-a marūa

Mwangi foc-sub-tns-read-fv letter

Mwangi has read the letter

(16b) Mwangi nīathoomera cūcū marūa

Mwangi nī-a-a-thoom-er-a cūcū marūa

Mwangi foc-sub-tns-read-app-fv grandmother letter

Mwangi has read the letter for grandmother

'Cūcū' - (grandmother), being the beneficiary, will get its role from the derived verb while 'marūa' - (letter) will structurally be theta-identified as patient. True to the theory, only the beneficiary (direct argument) will exhibit direct/primary object features. See below:

(16c) Cūcū nīathoomerwo marūa (nī Mwangi)

Cūcū nī-a-a-thoom-er-w-o marūa (nī Mwangi)

Grandmother foc-sub-tns-read-app-pas-fv letter (by Mwangi)

Grandmother has been read for a letter (by Mwangi).

(16d) Mwangi nīamūthoomera marūa

Mwangi nī-a-amū-thoom-er-a marūa

Mwangi foc-sub-tns-op(her-grandmother)-read-app-fv letter.

Mwangi has read for her a letter.

(16e) \*Marūa nīmathoomerwo cūcū (nī Mwangi)

Marūa nī-ma-a-thoom-er-w-o cūcū (nī Mwangi)

Letter foc-sub-tns-read-app-pas-fv grandmother (by Mwangi)

The letter has been read for grandmother (by Mwangi).

(16f) \*Mwangi nīamathoomera cūcū

Mwangi nī-a-a-ma-thoom-er-a cūcū

Mwangi foc-sub-tns-op-(it-letter)-read-app-fv grandmather.

Mwangi has read it for grandmother.

In 16(c) and 16(d), we see the beneficiary acting as subject of the passive and marking object agreement respectively. An attempt to do the same with the patient argument 'marūa' (letter) results in the ill-formedness evident in 16(e) and 16(f). This shows that Gikūyū is an asymmetrical language as is argued in section 3.4.2.

Completely beyond the conceptualization of the Merger Theory are applicative sentences with more than two post-verbal arguments. We exemplify this fact with applicative constructions derived from monotransitive and ditransitive base verbs.

(17a) Wawerū nīatinia mūgate

Wawerū nī-a-a-tin-i-a mūgate

Wawerū focs-sub-tns-cut-caus-fv bread

Wawerū has cut the bread

(17b) Wawerū atinīria mūtumia kaana mūgate njīrainī

Wawerū a-a-tin-īr-i-a mūtumia kaana mūgate njīrainī.

Wawerū sub-tns-cut-app-caus-fv woman child bread at the path.

Wawerū has cut bread for the child on behalf of the woman while at the path.

(18a) Kīhīī nīgīatunya kairītu ibuku

Kīhīī nī-kī-a-tuny-a kairītu ibuku

Boy foc-sub-tns-snatch-fv girl book

The boy has snatched the book from the girl

(18b) Kīhīī nīgīatunyīra mwarimū kairītu ibuku kīwanja

Kīhīī nī-kī-a-tuny-īr-a mwarimū kairītu ibuku kīwanja

Boy foc-sub-tns-snatch-app-fv teacher girl book field.

- (i) The boy has snatched the book from the teacher's girl while in the field.
- (ii) The boy has snatched the book from the girl on behalf of the teacher while in the field

17(a) and 18(a) are underived. In 17(b), three arguments have been introduced. These are:

- (i) 'mūtumia'-(woman) which is the indirect beneficiary or possessor.
- (ii) 'kaana' -(child) which is the direct beneficiary or the possessed.
- (iii) 'njīrainī'-(at the path) which is a spatial locative .

Together with the object subcategorized by the verb, we now have four arguments in need of semantic roles but only two roles available – the benefactive and the structural one(theme).

The two benefactive arguments complicate matters further because the question becomes, 'which one has a greater claim to the benefactive role? What happens to the other benefactive argument and the locative in terms of role assignment?'

The same situation obtains in 18(b) where we also have two malefactive arguments ('mwarimū'-teacher and 'kairītu' –girls) or maleficiary (girl) and a beneficiary (teacher). In addition, the locative 'kīwanja'- (in the field) is present.

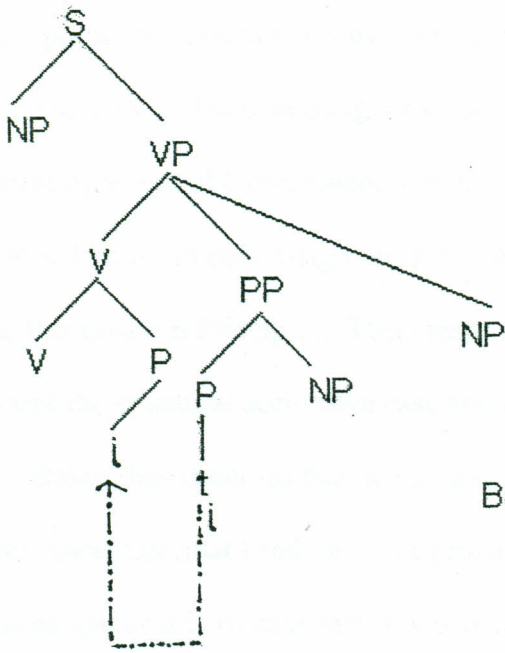
As it stands, the theory has no provision for sentences such as 17(b) and 18(b) and would therefore rule them out; yet they are well-formed and can even be expanded by including a motive argument as we saw in section 3.1.3 and 3.1.4. Thus, although the claims of the theory are useful in explaining some structural features of the *Gikūyū* applicative, further research on the theory is needed to determine how the applied affix can theta-mark any and all the arguments it introduces. A setback in the conceptual basis of the theory is that the affix is associated with a particular role (e.g. benefactive, goal, source etc) in a given construction depending on the semantics of the verb.

### 3.3.0 THE APPLICATIVE CONSTRUCTION WITHIN THE INCORPORATION THEORY (BAKER, 1988 a,b)

Baker seeks to explain applicative constructions by postulating that there are two syntactic levels of representation. These are an underlying D-structure and a surface S-structure. The function of the D-structure is to assign thematic roles such as goal while that of the S-structure is to display the surface configurations.

Both the verb and the applied affix are separately present at D-structure and each has its role assignee. The verb assigns a role to the basic object while the applied affix theta-marks the object it introduces.

Unlike the verb however, the applied affix has a morphological subcategorization feature that requires it to attach to an independent lexical item by S-structure. This is demanded by the Stray Affix Filter. In order to fulfil this requirement, the affix moves from its position as the head of a prepositional phrase to adjoin to the base verb. Here, Baker employs the Projection Principle which requires that all the theta-marked arguments be preserved from the D-structure to the S-structure. As a role assignor, the applied affix must leave a trace when it moves. The purpose of the trace is to preserve the assignor-assignee relationship and also to head the PP (prepositional phrase) node subcategorized for by the root verb. This gives rise to the following S-structure diagram.



Baker, 1988a:231

In the above diagram, what is in operation is the notion of move-alpha (move an item) as well as the Empty Category Principle (ECP) adopted from Government and Binding (GB) of Chomsky (1981). The ECP states that  $X^0$  (lexical category) can only move to adjoin to the lexical head which governs it so that the moved element still governs its trace (Baker, 1988a:233). In the diagram, the verb and the applied affix have fulfilled this condition.

Baker also uses the notion of abstract case in explaining whether it is the basic object or the applied one that becomes the direct (primary) object. His argument is that when the applied affix moves, it leaves the applied argument stranded and caseless (case assignment takes place under government and here the moved affix can not govern the applied argument because the PP node acts as a barrier to government). This argument needs

case in order to avoid violating the Visibility Condition that requires every argument to get case for purposes of theta-marking (1988a:264).

The only viable case-assignor is the derived verb which governs the stranded argument by virtue of Government Transparency Corollary. A further stipulation here is that the derived verb can only assign the same case that is assigned by the underived verb (Case Frame Preservation Principle). This means that the derived verb will assign the applied argument the structural accusative case associated with transitive base verbs.

Baker then observes that actual language data shows that it is the argument bearing this structural case that exhibits direct primary features such as being subject of passive sentences (since it is its case that is absorbed by the passive affix thereby necessitating the movement of this argument to subject position). According to the theory, this argument tends to be benefactive.

The basic object of a transitive base verb is said to be assigned structural case under government at S-structure. Alternatively, this object can receive the necessary identification (for theta-marking) by incorporating into the verb. This comes about through a process that Baker calls N-V (noun-verb) Reanalysis in which the governor (verb) abstractly incorporates its governee (basic object). This relation serves as a PF(phonological form) identifier just as case does and is therefore said to be an adequate input for the process of theta assignment

We gather from the foregoing exposition of the general mechanism of the theory, that its concern is centered on transitive verbs and the benefactive argument introduced by the applied affix. How do these facts account for the range of applicative constructions observed in Gikūyū?

### 3.3.1 THE GĪKŪYŪ APPLICATIVE WITHIN THE INCORPORATION THEORY

As far as applicatives formed from zero-valency verbs go, the theory fails miserably. This is because of its stipulation that the applied argument necessarily receives the structural accusative case. For a verb to assign this case, it must be transitive (this is the case given to the direct object). Now, zero-valency verbs have no objects and therefore would be ruled out by the theory as possible inputs for applicative constructions because the applied argument would be caseless and subsequently thetaless (given that case assignment is a pre-requisite for theta assignment). This would lead to the violation of the Case Filter and Theta-criterion.

In Gīkūyū however, such constructions exist and are as legitimate as those derived from transitive verbs envisaged by the theory. The example repeated below shows this:

(19a) Mbura nīyakīa

Mbura nī-ī-a-kī-a

Rain foc-sub-tns-stop raining-fv

The rain has stopped raining.

(19b) Mbura nīyakīira handū hooru

Mbura nī-ī-a-kī-īr-a handū hooru

Rain foc-sub-tns-stop raining-app-fv place bad

The rain has stopped raining at the wrong time.

The theory is similarly challenged in handling applicatives derived from intransitive verbs since such verbs also lack structural accusative case to assign to the applied argument.

Consider the following examples:

(20a) Kaana nīgathiī

Kaana nī-ka-a-thiī-∅

Child foc-sub-tns-go-fv

The child has gone.

(20b) Kaana nīgathiīra ndukainī

Kaana nī-ka-a-thi-īr-a ndukainī

Child sub-tns-go-app-fv at the shop

The child has gone through the shop.

(20c) Kaana gathiīra guoya

Kaan ka-a-thi-īr-a guoya

Child sub-tns-go-app-fv fear

The child has gone because of fear.

Although Baker acknowledges that constructions such as 20(b) and 20(c) are attested in language, he terms them idiosyncratic, arguing that they are semantically unpredictable. He therefore consigns them to the lexicon citing their marginal productivity. Obviously then, such structures are outside the scope of the theory owing to its syntactic leanings. Our reaction to these claims is that the said semantic idiosyncrasy is not true of applicatives such as (20(b) and 20(c) above. Indeed, the locative and the motive meanings in the two sentences respectively, are the most productive with all verb types (see section 2.3.2). That the theory cannot account for them syntactically is therefore a weakness.

The theory, however, satisfactorily explains the following example though intransitive.

(21a) Ciana nīcianegena

Ciana nī-ci-a-negen-a

Children foc-sub-tns-make noise-fv

The children have made noise.

(20b) Ciana nīcianegera mūrwaru

Ciana nī-ci-a-negen-er-a mūrwaru

Children foc-sub-tns-make noise-app-fv sick person

The children have made noise for the sick person.

This is because Baker claims that intransitive verbs capable of taking a cognate object behave like transitive verbs with respect to applicative formation. The verb in 21 is one such as it can take the cognate object 'inegene rĩũru' - (bad noise). We show this below:

- (21c) Ciana nĩcianegera mĩrwaru inegene rĩũru  
 Ciana nĩ-ci-a-negen-er-a mĩrwaru inegene rĩũru  
 Children foc-sub-tns-make noise-app-fv sick person noise bad  
 The children have made bad noise for the sick person.

Thus, in the unmarked 21(b), unspecified cognate object deletion is assumed to have occurred. In the light of this assumption, the verb has structural case to assign to the maleficiary (flip counterpart of beneficiary). The covert cognate object in 21(b) gets the inherent case or is PF identified by abstractly incorporating into the verb.

Baker argues that when the applied affix attaches to intransitive verbs that cannot take a cognate object, the benefactive/malefactive interpretation is not possible. To illustrate his point, Baker (1988a: 255) uses the example below from Chichewa, a Bantu language spoken in Malawi and other parts of Southern Africa.

- (22a) Mtolankhani a-ku-thamang-a  
 Journalist sp-pres-run-asp  
 The journalist ran

(22b) \*Mtolankhani a-ku-thamang-ir-a chiphadzuwa

Journalist sp-pres-run-for-asp

The journalist ran for the beautiful woman.

According to him, the use of the applied affix and the argument associated with it, 'chiphadzuwa' - (beautiful woman), are idiosyncratic because the sentence lacks a benefactive reading. He thus concludes that benefactive applicatives can not emanate from intransitive verbs such as 'thamanga' - (run). His other examples are 'kuyenda' - (to walk) and 'kuseka' - (to laugh).

His claim is negated by Alsina and Mchombo (1990) who assert that 22(b) does indeed have a benefactive reading (The journalist ran for the woman).

A translation of (22) into Gikũyũ gives us (23) below.

(23a) Mwandiki ũhorō nĩateng'era

Mwandiki ũhorō nĩ-a-a-teng'er-a

Writer news foc-sub-tns-run-fv

The journalist has run.

(23b) Mwandiki ũhorō nĩateng'erera mūtumia mũthaka

Mwandiki ũhorō nĩ-a-a-teng'er-er-a mūtumia mũthaka

Writer news foc-sub-tns-run-app-fv woman beautiful

(i) The journalist has run for the beautiful woman.

(ii) The journalist has run to the beautiful woman.

Baker's analysis of 22(b) above does not apply to the Gĩkũyũ equivalent in (23)

because the verb 'teng'era' - (run) is capable of hosting a cognate object such as 'ihenya ikuhi' - (short race). If such a cognate object is inserted in 23(b), the only interpretation available will be the benefactive one. This gives evidence that benefactive applicatives can indeed be formed from verbs that are basically intransitive<sup>1</sup>. Other intransitive verbs that behave similarly include: 'kua' - (die), 'hika' - (get married), 'caya' - (groan/ be concerned/considerate), 'teta' - (complain/advocate), 'ng'eta' - (be stubborn), 'kira' - (keep quiet), 'gwĩĩĩĩ' - (to boast). All these verbs can take a benefactive/malefactive applied argument with or without the presence of a cognate nominal.

Indeed we would like to claim that the ability of an intransitive verb to take an applied argument does not hinge on its ability to host a cognate nominal. Our data reveals that virtually all verb types and sub-types can take cognate objects yet not every verb can accept a benefactive/malefactive argument. The examples below illustrate this claim.

(24a) Mũthuuri ũcio nĩahorera mũhorerere mũũru

Mũthuuri ũcio nĩ-a-a-horer-a mũhorerere mũũru

Man that foc-sub-tns-become meek-fv meekness bad

That man has become meek a bad meekness/That man is too meek.

- (24b) \*Mũthuri ũcio nĩahorerera mũtunia mũhorerere mũũru  
 Mũthuri ũcio nĩ-a-a-horer-er-a mũtunia mũhorerere mũũru  
 Man that foc-sub-tns-be meek-app-fv woman meekness bad  
 That man has become meek for/on behalf of the woman a bad meekness
- (25a) Kũgũrũ nĩkwaimba mũimbĩre wa mwanya  
 Kũgũrũ nĩ-kũ-a-imb-a mũimbĩre wa mwanya  
 Leg foc-sub-tns-swell-fv swelling peculiar  
 The leg has swelled a peculiar swelling/ in a peculiar way
- (25b) \*Guuka nĩaimbĩra cũcũ kũgũrũ mũimbĩre wa mwanya  
 Guuka nĩ-a-a-imb-ĩr-a cũcũ kũgũrũ mũimbĩre wa mwanya  
 Grandfather foc-sub-tns-swell-app-fv grandmother leg swelling peculiar  
 Grandfather has swelled the leg for grandmother a peculiar swelling

In (24), the cognate object is 'muhorerere muuru'- (a bad meekness) while that in (25) is 'mũimbĩre wa mwanya'- (peculiar swelling). These two examples serve to show that a verb can take a cognate nominal and yet fail to accept a benefactive/malefactive argument as is evidenced by the ill-formed 24(b) and 25(b). This ill-formedness cannot be pegged on case since the applied nominals will take the structural case and the cognate ones the inherent case in line with the stipulation of the theory. Rather, the determining issue here is whether or not

<sup>1</sup> Let it be noted that we do not consider cognate nominals basic objects because they are optional. They are also

the semantics of the verb can accommodate a benefactive/malefactive reading. In other words, is it possible to do what the verb denotes on behalf of, for or to somebody? Concerning the verbs in (24) and (25), the answer to these questions is no hence the inadmissibility of a benefactive/malefactive interpretation. Other verbs that would fall under this category are: 'kena'- (be happy), 'nora'- (be fat), 'thakara'- (be beautiful), 'maka'- (be frightened). Predictably, all these are verbs that indicate a state of being.

We have already noted that the theory has no explanation for Gikũyũ applied locatives. However, we feel that if Baker's definition of transitivity covers intransitive verbs with the capacity to take cognate objects, there is no reason why it shouldn't extend to include intransitive verbs with non-applied locative nominals. This would enable the theory to cater for the following example, something it fails to do as it currently stands.

(26a) Kaana nĩgathiĩ (ndukainĩ)

Kaana nĩ-ka-a-thiĩ-∅ (ndukainĩ)

Child foc-sub-tns-go-fv (to the shop).

The child has gone (to the shop)

(26b) Kaana nĩgathiĩra Mwangi ndukainĩ

Kaana nĩ-ka-a-thi-ĩr-a Mwangi ndukainĩ

Child foc-sub-tns-go-app-fv Mwangi to the shop

The child has gone to the shop for Mwangi

26(a) is the basic sentence from which 26(b) is derived. The optional locative in 26(a) does not need case for it is not an argument of the verb. In 26(b) however, structural case would go to the benefactive 'Mwangi' and the inherent case to the locative object 'ndukainī'-(to the shop) thus accounting for the well-formedness of the sentence.

Unfortunately, even with such an extension, the theory fails to accommodate the example below:

(26c) Kaana nīgathiīra Mwangi mwarī ndukainī gītō

Kaana nī-ka-a-thi-īr-a Mwangi mwarī ndukainī gītō

Child foc-sub-tns-go-app-fv Mwangi daughter to the shop respect

The child has gone to the shop for Mwangi due to respect.

Here we have only two cases available (one structural and the other inherent) for four assignees thus breaking the Case Frame Preservation Principle. The pertinent questions are: (1) if the benefactive 'Mwangi' gets the accusative case, which of the remaining three internal arguments receives the inherent case? (2) How will the other two arguments be case-identified? (3) Can case assignment determine the configuration of the non-benefactive arguments? None of these questions has an answer in the Incorporation Theory as formulated in Baker (1988a).

In relation to monotransitive verbs, Baker correctly predicts that the applied object, and not the basic one, manifests all the features of a direct/primary object. As earlier mentioned, it is this applied object that will move to subject position in a passive construction.

This follows from the loss of the structural case to the passive affix thereby necessitating movement to a position from which case can be assigned (see chapter 5 on how the need for case motivates movement). e.g.

(27a) Mikora nīyacinīra andū nyūmba

Mikora nī-ī-a-cin-īr-a andū nyūmba

Thugs/arsonists foc-sub-tns-burn-app-fv people houses

The thugs/arsonists have burned people's houses.

(27b) Andū nīmacinīrwo nyūmba (nī mīkora)

Andū nīma-a-cin-īr-w-o nyūmba (nī mīkora)

People foc-sub-tns-burn-app-pas-fv houses (by thugs/arsonists).

People have been burnt for houses (by thugs/arsonists)

(27c) \*Nyūmba nīciacinīrwo andū (nī mīkora)

Nyūmba nī-ci-a-cin-īr-w-o andū (nī mīkora)

Houses foc-sub-tns-burn-app-pas-fv people (by thugs/arsonists)

Houses have been burned for people (by thugs/arsonists),

In 27(a) 'andū'-(people) is the applied object while 'nyūmba'-(houses) is the basic one. Baker explains the positioning of the two objects in terms of case. That is, for an argument to receive structural case, it must be adjacent to the assignor (in this case the derived

verb). Since the applied argument is the one expected to receive this case, it must be placed next to the verb as this is the position from which structural case is assigned. In 27(b), we see this object in the subject position of the passive sentence. 27(c) is ill-formed because the passive affix doesn't absorb the inherent case which would mean that the preposing of the bearer of this case, ('nyũmba'-houses), is totally unmotivated.

Again, only the structural case assignee (the maleficiary 'andu aingi'-many people) will be expected to mark object agreement with the derived verb following the fact that objects tend to agree with their case assignors. This is attested below.

(27d) Mikora nĩyamacinĩra nyũmba

Mikora nĩ-ĩ-a-ma-cin-ĩr-a nyũmba

Thugs/arsonists foc-sub-tns-op(them-people)burn-app-fv houses.

Thugs/arsonists have burned houses for them.

(27e) \*Mikora nĩyacicinĩra andũ

Mikora nĩ-ĩ-a-ci-cin-ĩr-a andũ

Thugs/arsonists foc-sub-tns-op(them-houses)-burn-app-fv people

Thugs/arsonists have burned them for people.

So far so good, but the theory immediately encounters problems when another argument is introduced as is the case below:

(27f) Mikora yacinīra andū nyūmba wūiru

Mikora ī-a-cin-īr-a andū nyūmba wūiru

Thugs/arsonists sub-tns-burn-app-fv people houses jealousy

Thugs/arsonists have burned people's house because of jealousy

As already discussed above, this is a case of too many arguments competing for too few

cases. The same problem is evident in ditransitive verbs e.g.

(28a) Kīhīī nīgīātunya kairītu ibuku

Kīhīī nī-kī-a-tuny-a kairītu ibuku

Boy foc-sub-tns-snatch-fv girl book

The boy has snatched the book from the girl

(28b) Kīhīī nīgīātunyīra mwarimū kairītu ibuku kīwanja

Kīhīī nī-kī-a-tuny-īr-a mwarimū kairītu ibuku kīwanja

Boy foc-sub-tns-snatch-app-fv teacher girl book in the field

(i) The boy has snatched the book from the teacher's girl while in the field.

(ii) The boy has snatched the book from the girl on behalf of the teacher while in the field.

The two cases available are distributed to the two arguments in 28(a) meaning that nothing is left for the two applied arguments introduced in 28(b)<sup>2</sup>. Even if it is argued that the benefactive/malefactive argument will assume the structural case, two other arguments, one basic and the other applied, will remain without case. This situation is a blatant contravention of the stipulations of this and related theories.

To summarize this section, we have shown that Baker's Incorporation Theory has no place for applicatives formed from zero-valency verbs since such verbs lack structural accusative case to assign to the applied argument. With regard to intransitive verbs, we have seen that Baker's predictions as to which verbs will take a benefactive/malefactive applied argument are not applicable to Gikūyū. We have also seen that his generalization that intransitive verbs will typically not accept benefactive/malefactive excludes some Gikūyū applicative constructions.

The fact that his theory centers around benefactive arguments means that locative and motive arguments are left out. He regards these as isolated idiosyncrasies but we have shown that they are prolific in Gikūyū.

A major flaw of the theory is its reliance on case assignment. This limits it to only accommodating structures with two internal arguments since there are only two cases available for distribution. As attested in Gikūyū, some sentences can have up to five post-verbal objects thereby being completely beyond the scope of the theory.

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<sup>2</sup> Since Gikūyū is not a double object language like Kinyarwanda, it cannot assign two structural cases to the two

### 3.4.0 MATTERS ARISING

Here we consider two issues that are off-shoots of our discussion of the applicative morpheme whose chief characteristic is the ability to introduce multiple objects. The two issues are: one, the number of applied affixes present in multi-object applicative constructions and two, whether all the objects introduced by the applied affix have equal objecthood status

#### 3.4.1 MULTIPLE APPLICATIVES?

In section 3.1.4, we have claimed that regardless of the number of applied nominals present in a construction, only one applied affix appears syntactically. We wish to give this assertion closer scrutiny here.

We note with interest that there are instances where two applied affixes appear to introduce only one applied nominal. See(29) for illustration:

(29a) Tua macani

Tu-a macani

Pick-fv tea

Pick tea.

(29b) Tuīra mūrīmi macani

---

objects in 28(a).

Tu-īr-a mūrīmi macani

Pick-app-fv famer tea

- (i) Pick tea for the farmer.
- (ii) Pick tea on behalf of the farmer

(29c) Tuīrīra mūrīmi macani

Tu-īr-īr-a mūrīmi macani

Pick-app-?app-fv farmer tea

- (i) Pick tea for the farmer.
- (ii) Pick tea on behalf of the farmer

While in 29(b) we have one applied affix to one applied nominal (mūrīmi-farmer), in 29(c) we have two seemingly applied affixes to one applied argument. Since 29(b) and 29(c) mean the same, we are not able at this point to account for the occurrence of the second 'applied' affix in 29(c). This second affix is obviously redundant since it does not introduce an argument of its own. Other such examples are:

(30) Thi-īr-a/Thi-īr-īr-a – go for/through

(31) Ku-īr-a/ku-īr-īr-a - die for/ at

(32) Gu-īr-a/gu-īr-īr-a – fall on/at

We rest the matter by observing that the roots of these idiosyncratic verbs end in a vowel.

There is also an affix that resembles the applicative morpheme in form but which is devoid of any applied meaning or the attendant applied arguments<sup>3</sup>. Consider:

(33a) Nītūaruga irio

Nī-tū-a-rug-a irio

Foc-sub-tns-cook-fv food

We have cooked food.

(33b) Nītūarugīrīra irio

Ni-tu-arug-irir-a irio

Foc-sub-tns-cook-inten-fv food

We have cooked some additional food.

(33c) Nītūarugīra ageni irio

nī-tū-a-arug-īr-a ageni iro

Foc-sub-tns-cook-app-fv visitors food.

We have cooked for the visitors food

(33b) appears to have two applied affixes but in actual fact, what we have is the intensive morpheme realized as *irīr/erer* depending on the phonological conditioning. It carries the meaning, 'top it up'. Unlike the applicative, the intensive does not alter the

<sup>3</sup> Such affixes are mistakenly termed applicative in Mabugu (1999).

valency of the verb. Contrast 33(a) on the one hand with the intensive 33(b) and the applicative 33(c) on the other. It is only in 33(c) that a new argument ('ageni'-visitors) has been introduced.

Above, we have seen that there are affixes that deceptively resemble the applied affix but which are functionally different since they do not introduce any applied argument. As such, we can only conclude that Gikūyū, unlike Kikamba as discussed in Kioko (1994), does not allow the co-occurrence of applicative affixes.

### 3.4.2 OBJECTS IN GĪKŪYŪ: SYMMETRICAL OR ASYMMETRICAL?

Having stated earlier in this chapter that an applied verb in Gikūyū can be followed by as many as five object nominals, it is only logical to ask if these objects contract a symmetrical an asymmetrical relation. Object symmetry or asymmetry is primarily determined by the syntactic behaviour of post-verbal nominals. In symmetrical languages, all the objects portray primary object features but in asymmetrical ones only one of the post-verbal nominals exhibits these features (Hyman and Duranti, 1982; Bresnan and Moshi, 1990).

In Bresnan and Moshi (Ibid.) and Demuth (1998), several Bantu languages have been classified using the parameter of symmetry /asymmetry. Gikūyū is not on their list but Kimeru and Luhya are said to be symmetrical while Kiswahili is asymmetrical. Kioko (1994) provides evidence that Kikamba is symmetrical. Zaenan (1982) concludes, without adequate

and convincing evidence that Gikūyū is asymmetrical while Masunaga (1983) arrives at the reverse conclusion. Due to this controversy, we shall seek to determine this issue here.

Unlike Bresnan and Moshi (Ibid) who approach the classification theoretically, we, like Hyman and Duranti (1982), will focus on the descriptive aspect of it using the three most frequently used tests. These are: (1) passivization (2) adjacency to the verb (3) cliticization (the ability to occur pronominally and to mark object agreement). These are said to be the main features of a primary object. Which object will bear these features is in turn determined by other parameters such as semantic role, person/animacy and definiteness/determinedness.

We now give examples to show how these factors operate in Gikūyū in determining the symmetry or otherwise of the language.

(34a) Wawerū nīatinia mūgate

Wawerū nī-a-a-tin-i-a mūgate

Wawerū foc-sub-tns-cut-caus-fv bread

Wawerū has cut the bread

(34b) Wawerū nīatiniria kaana mūgate njīrainī thoni

Wawerū nī-a-a-atin-īr-i-a kaana mūgate njīrainī thoni

Wawerū foc-sub-tns-cut-app-caus-fv child bread at the path embarrassment

Wawerū has cut bread for the child while at the path because of embarrassment.

Regarding adjacency to the verb, we note that the order in which the four objects in 34(b) occur is rigidly fixed. The benefactive 'kaana' - (child) must come first, followed by the theme 'mūgate' -(bread), then the spatial locative 'njiraini' (at the path) and finally the motive 'thoni' -(embarrassment). Any change results in ill-formedness.

Among the four objects, only the benefactive can be cliticized as in 34(c) below. Attempts to cliticize any other object yields unacceptable sentences as can be seen in the following examples.

(34c) Wawerũ nĩagatinĩria mūgate njĩrainĩ thoni.

Wawerũ nĩ-a-a-ga-tin-ĩr-i-a mūgate njĩrainĩ thoni

Wawerũ foc-sub-tns-12om-cut-app-caus-fv bread at the path embarrassment.

Wawerũ has cut bread for it (child) while at the path because of embarrassment.

(34d) \*Wawerũ nĩautinĩria kaana njĩrainĩ thoni<sup>4</sup>

Wawerũ nĩ-a-a-ũ-tin-ĩr-i-a kaana njĩrainĩ thoni

Wawerũ foc-sub-tns-13om-cut-app-caus-fv child at the path embarrassment.

Wawerũ has cut it (bread) for the child while at the path because of embarrassment.

(34e) \*Waweru niagutiniria kaana mugate thoni

Wawerũ nĩ-a-a-kũ-tin-ĩr-i-a kaana mũgate thoni

Wawerũ foc-sub-tns-9om-cut-app-caus-fv child bread embarrassment.

Wawerũ has cut bread for the child while there (at the path)

because of embarrassment.

(34f) \*Wawerũ nĩacitiniria kaana mũgate njĩrainĩ

Wawerũ nĩ-a-a-ci-tin-ĩr-i-a kaana mũgate njĩrainĩ

Wawerũ foc-sub-tns-10om-cut-app-caus-fv child bread at the path because of  
of embarrassment.

Wawerũ has cut bread for the child because of it (embarrassment) while at the  
path.

Consequently, it follows that in Gikũyũ two objects cannot be cliticized simultaneously as is the case in some symmetrical languages like Kinyarwanda. Hence the ill-formedness of the sentence below:

(34g) \*Wawerũ nĩagaũtiniria njĩrainĩ thoni

Wawerũ nĩ-a-a-ka-ũ-tin-ĩr-i-a njĩrainĩ thoni

Wawerũ foc-sub-tns-12om-3om-cut-app-caus-fv at the path embarrassment.

Wawerũ has cut for it (child) it (bread) at the path because of embarrassment.

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<sup>4</sup> Later in this section it will be shown that such constructions can pass under restricted circumstances

If the above sentence were correct, it would mean that the two objects (child and bread) have equal status as primary objects. This is however not the case.

As for passivization, only the benefactive (kaana-child) and the locative (njĩrainĩ – at the path ) pass the test. Consider:

(35a) Kaana nĩgatinĩrio mũgate njĩrainĩ thoni (nĩ Wawerũ)

Kaana nĩ-ka-a-tin-ĩr-i-o mũgate njĩrainĩ thoni (nĩ Wawerũ)

Child foc-sub-tns-cut-app-caus-pas bread at the path embarrassment (by

Wawerũ)

The child has been cut for bread (by Wawerũ) while at the path because of embarrassment.

(35b) Mũgate nĩwatinĩrio kaana njĩrainĩ thoni (nĩ Wawerũ)

Mũgate nĩ-ũ-a-tin-ĩr-i-o kaana njĩrainĩ thoni (nĩ Wawerũ)

Bread foc-sub-tns-cut-app-caus-pas child at the path

embarrassment (by Wawerũ).

Bread has been cut for the child (by Wawerũ) while at the path

because of embarrassment.<sup>5</sup>

(35c) Njĩrainĩ gwatinĩrio kaana mũgate thoni (nĩ Wawerũ)

Njĩrainĩ kũ-a-tin-ĩr-i-o kaana mũgate thoni (nĩ Wawerũ)

At the path sub-tns-cut-tns-cut-app-caus-pas child bread  
embarrassment (by Wawerū) because of embarrassment.

(35d) \*Thoni nīciatinīrio kaana mūgate njīrainī nī (Wawerū)

Thoni ci-a-tin-īr-i-o kaana mūgate njīrainī (nī Wawerū)

Embarrassment foc-sub-tns-cut-app-caus-pas child bread at the path  
(by Wawerū)

Embarrassment has caused bread to be cut for the child (by Wawerū)  
while at the path.

Looking back at 35(a), we see that the object 'mūgate'-(bread) now appears adjacent to the verb. Does this mean that it has inherited the primary object features formerly held by the now preposed 'kaana'-(child)? We can not test this using the passivization criterion since the sentence is already passive (by principle, passive sentences are not passivizable). We can however use the cliticization test as illustrated below:

(35e) \*Kaana nīgaūtinīrio njīrainī thoni (nī Wawerū)

Kaana nī-ka-a-ū-tin-īr-i-o njīrainī thoni (nī Wawerū)

Child foc-sub-tns-3om-cut-app-caus-pas at the path embarrassment  
(by Wawerū)

The child has been cut for it (bread) (by Wawerū) while at the path because

<sup>5</sup> Again this can pass under special circumstances as we shall see later.

of embarrassment.

The unacceptable 35(e) would seem to suggest that 'mũgate' (bread) is not a primary object since it can not qualify as one solely on the basis of adjacency to the verb.

From the above tests, it is obvious that only the first object in the series carries all the three features associated with primary objects. Even when this object loses adjacency in passivization, the object next in line does not take up all the features. Naturally a pertinent question arises, "What determines the object that will bear these three syntactic primary features?" Our answer to this question is largely borne out by Kioko (1999) which gives a detailed account of how objecthood in Bantu can be determined. We shall briefly apply the relevant criteria to Gikũyũ data.

Looking at the foregoing examples, one determinant appears to be the animacy factor. All the objects, save 'kaana'-(child) are ananimate. This points to the conclusion that when a human object is coupled with non-human ones, the former is accorded primacy. This is reinforced by the fact that when there are two animate objects, the two can pass the three primary object tests albeit with a change in meaning<sup>6</sup>. Consider:

(36a) Wawerũ nĩatinĩria mũtumia kaana mũgate

Wawerũ nĩ-a-a-tin-ĩr-i-a mũtumia kaana mũgate

Wawerũ foc-sub-tns-cut-app-caus-fv woman child bread

(i) Wawerũ has cut bread for the woman's child

(ii) Wawerũ has cut bread for the child on behalf of the woman

(36b) Wawerũ nĩatinĩria kaana mũtũmia mũgate

Wawerũ nĩ-a-a-tin-ĩr-i-a kaana mũtũmia mũgate

Wawerũ foc-sub-tns-cut-app-caus-fv child woman bread

Wawerũ has cut bread for the woman on behalf of the child.

The two examples demonstrate that the animate arguments ('kaana'-child and 'mũtũmia'-woman) are positionally interchangeable but with a semantic change. This suggests that the parameter of age is fluid and may be overtaken by semantic considerations.

Another parameter that determines primacy is the semantic role borne by an object. According to Moshi (1998), Demuth (1998) and Kioko (1999) among others, the object designated beneficiary has the greatest entitlement to the primary object features. 'Kaana'-(child) is the bearer of this role in 36(b) and all the subsequent examples. As already illustrated, it is the primary object. In 36(a) and 36(b) the two animate arguments are both beneficiaries in one sense. In 36(a), 'mũtũmia'-(woman) is a possessor or indirect benefactive while 'kaana'-(child) is the possessed direct benefactive. In 36(b) 'mũtũmia'-(woman) is now the direct benefactee and 'kaana'-(child) the indirect one.

In 36(a), only 'mũtũmia-(woman) can be cliticized if the meaning is to be preserved while in 36(b) only 'kaana'-(child) can. e.g.

(36c) Wawerũ nĩamũtinĩria kaana mũgate

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<sup>6</sup> Kioko (1999) notes that when two objects are at par in animacy, primacy is determined by other

Wawerũ nĩ-a-a-mũ-tin-ĩr-i-a kaana mũgate.

Wawerũ foc-sub-tns-1om-cut-app-caus-fv child bread

- (i) Wawerũ has cut bread for the child for her (woman)
- (ii) Wawerũ has cut bread for the child on her (woman) behalf.

(36d) Wawerũ nĩagatinĩria mũtunia mũgate

Wawerũ nĩ-a-a-ka-tin-ĩr-i-a mũtunia mũgate

Wawerũ foc-sub-tns-12om-cut-app-caus-fv woman

Wawerũ has cut bread for the woman on its (child's) behalf.

Needless to say, there are also two passivization patterns available as is shown below:

(36e) Mũtunia nĩatinĩrio kaana mũgate

Mũtunia nĩ-a-a-tin-ĩr-i-o kaana mũgate.

Woman foc-sub-tns-cut-app-caus-pas child bread

- (i) The woman's child was cut bread for.
- (ii) Bread was cut for the child on behalf of the woman.

(36f) Kaana nĩgatinĩrio mũtunia mũgate

Kaana nĩ-ka-a-tin-ĩr-i-o mũtunia mũgate

Child foc-sub-tns-cut-app-caus-pas woman bread

Bread was cut for the woman on behalf of the child.

Example 36 has served to show that when two human objects follow each other, their syntactic positions are interchangeable depending on the meaning intended. This means that they can alternately occupy the primary object position since they bear the semantic role of beneficiary and are both animate.

Naturally, the question arises as to what obtains when two objects are at par in animacy but have different semantic roles. In other words, how are the roles ranked? Bresnan and Moshi (1990) and Kioko (1999) have for example noted that in Bantu, the benefactive/malefactive role is ranked higher than the theme. This claim is justified by Gikũyũ data as seen below:

(37a) Cibũ níatuma athuuri

Cibũ nĩ-a-a-tũm-a athuuri

Chief foc-sub-tns-send-fv elders

The chief has sent elders.

(37b) Cibũ níatũmĩra wakiri athuuri

Cibũ nĩ-a-a-tũm-ĩr-a wakiri athuuri

Chief foc-sub-send-app-fv lawyer elders.

The chief has sent the lawyer elders.

In the applicative 37(b), the two objects are animate, but while ‘wakiri’-(lawyer) is benefactive/malefactive, ‘athuuri’-(elders) is theme. If the elders were sent to the lawyer on a positive mission, then the role of ‘wakiri’ is benefactive. Conversely, if the mission was adverse, then ‘wakiri’ bears a malefactive semantic role. (37b) shows that the benefactive/malefactive role is ranked higher than the theme role since it is ‘wakiri’-(lawyer) that is potentially capable of exhibiting the three basic features of a primary object already discussed. Further support for this claim comes from the fact that if the two objects changed syntactic positions, (which is possible given that they are both animate) then their semantic roles would be reversed. e.g.

- (37c) Cibũ niátũmĩra athuuri wakiri  
 Cibũ nĩ-a-a-tũm-ĩr-a athuuri wakiri  
 Chief foc-sub-tns-send-app-fv elders lawyer  
 The chief has sent the elders a lawyer.

‘Athuuri’-(elders) is now benefactive/malefactive while ‘wakiri’-(lawyer) is theme.

Apparently, when animacy competes with the semantic role, the latter wins. The following example exemplifies this:

- (38a) Ithe agathĩnja ndegwa igiri  
 Ithe a-ka-thĩnj-a ndegwa igiri

The father sub-tns-slaughter-fv bulls two.

The father will slaughter two bulls.

(38b) *Ithe agathinjira ūhiki ūcio ndegwa igiri*

*Ithe a-ka-thinj-ir-a ūhiki ūcio ndegwa igiri*

The father sub-tns-slaughter-app-fv wedding that bulls two

The father will slaughter for that wedding two bulls

In terms of animacy, the inanimate 'ūhiki' (wedding) in the applicative 38(b) ranks lower than the animate 'ndegwa' (bulls). However, in regard to semantic role, the benefactive 'ūhiki'-(wedding) overrides the patient 'ndegwa'-(bulls). The fact that the sequence of occurrence of the two objects in 38(b) is rigidly fixed can only mean that semantic role precedence over animacy determining the primary object in Gikūyū.

There are marked cases however, where an animate non-benefactive object can occur as a primary object. Such an argument is likely to be a theme. Examples follow:

(39a) *Mūriithi nīatuira ng'ombe thaara*

*Mūriithi nī-a-a-tu-ir-a ng'ombe thaara*

Shepherd foc-sub-tns-app-fv cow fodder

The shepherd has cut for the cow a fodder

- (39b) Mūriithi atuīra thaara ng'ombe nayo mīrīo mbūri  
 Mūriithi a-a-tu-īr-a thaara ng'ombe nayo mīrīo mbūri  
 Shepherd sub-tns-cut-app-fv fodder cow and vines sheep  
 The shepherd has cut fodder for the cow and vines for the sheep

39(a), in which the benefactive 'ng'ombe' -(cow) appears adjacent to the applied verb, is the typical construction. In 39(b) however, we find that position occupied by the theme 'thaara'-(fodder). This would seem to suggest that the inanimate theme is the primary object contrary to expectation.

Further evidence for this primacy comes from the fact that the same theme can be cliticized and subjectivized as in 39(c) and 39(d) respectively:

- (39c) Mūriithi nīaūtuīra ng'ombe  
 Mūriithi nī-a-a-ū-tu-īr-a ng'ombe  
 Shepherd foc-sub-tns-9om-cut-app-fv cow  
 The shepherd has cut it (fodder) for the cow
- (39d) Thaara watuīrwo ng'ombe nayo mīrīo mbūri  
 Thaara wa-a-tu-īr-w-o ng'ombe nayo mīrīo mbūri  
 Fodder sub-tns-cut-app-pas-fv cow and vines sheep  
 The fodder was cut for the cow and vines for the sheep

The theme can also be given prominence if a question is asked about it e.g.

(40a) *Thaara ũriã uma haha wathii kũũ?*

*Thaara ũriã uma haha ũ-a-thiĩ-ϕ kũũ?*

Fodder that was here sub-tns-go-fv where?

Fodder that was here went where?

(40b) *(Thaara) nĩwatuĩrwo ng'ombe*

*(Thaara) nĩ-ũ-a-tu-ĩr-w-o ng'ombe*

(Fodder) foc-sub-tns-cut-app-pas-fv cow

(Fodder) it has been cut for the cow

40(b) is the answer to the question in 40(a). As already stated, ordinarily, examples 39(b) through to (d) and 40(b) would be ill-formed because an inanimate nominal is given syntactic prominence (through left-dislocation) over an animate one. This leads to the distorted and erroneous interpretation that the cow was cut for the fodder (the fodder is thus the beneficiary and the cow the theme). The said examples can however pass when pragmatic considerations are made. The aim would be to mark contrastive focus or to highlight information being sought<sup>7</sup>. For example in 39(b) (c) and (d), we want to focus our attention on 'thaara'-(fodder as opposed to ng'ombe-(cow) so that we can contrast what was cut for the cow with what was

<sup>7</sup> This fact is completely lost on Masunaga (1983) who fails to recognize the motivated markedness of the structures and assumes them to be ordinary. Zaenan (1982) is silent about such examples.

cut for the sheep. In 40(a) a specific question has been asked about the fodder and therefore it is only logical to topicalize it because it is the subject of our discussion. This is what Hyman and Durant (1982) refer to as the determinedness criterion. This means that a presupposed referent takes precedence over one being mentioned for the first time. What must be borne in mind here is that the semantic roles of the arguments (benefactive for the cow and theme for fodder) remain intact despite the presentational changes wrought by pragmatic considerations. The meaning therefore does not suffer since in both 39(a) and 39(b), the interpretation is that the fodder was cut for the cow.

So, is Gĩkũyũ symmetrical or asymmetrical in terms of objecthood? Based on the evidence we have adduced here, it would appear that Gĩkũyũ is asymmetrical unlike Kikamba and Kimeru. This is because only one of the post-verbal nominals in Gĩkũyũ passes the three tests namely: cliticization, passivization and adjacency to the root.

Although we have shown that semantic role and animacy (in that order) are pivotal in determining the choice of the primary object, it is useful to note that the pragmatic considerations of determinedness/definiteness may override all other parameters in a few marked cases. This happens when contrastive focus is being marked or when old information supercedes new information. In our view, such exceptional cases do not warrant a symmetrical analysis for Gĩkũyũ.

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## CHAPTER 4

### THE CAUSATIVE CONSTRUCTION

#### 4.0 INTRODUCTION

In this chapter, we will deal with the causative construction in Gikūyū. After a description of what causation generally entails, we will discuss the syntactic and semantic characteristics of the causative construction in Gikūyū. That is, we will examine how the choice of the causative morpheme (between -i- and -ithi-) can be predicted from the verb-type and the interpretation of a causative construction. We will then go on to analyse these causative constructions from two theoretical approaches namely: the Merger Theory (Marantz, 1984) and the Incorporation Theory (Baker, 1985) that have been used to explain causation in other Bantu languages such as chimwiini and chichewa. The strengths and weaknesses of these theories in handling the Gikūyū data will be highlighted, and where possible, an alternative analysis suggested.

#### 4.1 TYPES OF CAUSATIVES

According to Shibatani (1976:1-2), a causative situation between two events only occurs if the following conditions obtain:

- (a) The relationship between the two events is such that the occurrence of one event, the 'caused event', has been realised at  $T_2$ , which is after the time of the 'causing event'  $T_1$ .
- (b) The relation between the causing and the caused event is such that the speaker believes that the occurrence of the caused event is wholly dependent on the occurrence of the causing event'.

In short, causation takes place when a person performs an action as a result of which another event occurs. There are three main types of causatives that have been identified in natural language (Comrie, 1981:159-161). These are:

(a) Periphrastic also called analytic or separate predicate causatives. These are said to be characteristic of isolating languages like English e.g.

(1) He caused me to leave.

Here causation is expressed by the use of two predicates. The two predicates are 'caused me' and 'to leave'. The causing event is contained in the first predicate while the effect or result of it is in the second .

(b) Lexical causatives. Here the causing event and the effect event are so unsystematically related that they can only be handled lexically (not formed through any productive process). It applies to suppletive pairs like 'kill' and 'die' in English e.g.

(2a) Hitler caused many Jews to die.

(2b) Hitler killed many Jews.

The relation between the two cannot be generalised to other pairs. This type of causative is common in languages such as Japanese and Korean. Here , one word (kill) expresses the

meaning 'cause to die'.

(c) Morphological causatives. Here, the causative and the non-causative constructions are related to one another by morphological means such as affixation. That is, the non-causative verb and the causative morpheme (affix) join up to form a complex (derived) causative verb. e.g.

(3a) Tulibeba mizigo

We carried loads

(3b) Musa alitubebesha mizigo

Musa made us carry loads

In this case, the root verb 'beb-' (carry) joins up with the causative affix '-esh-' to form the causative verb 'bebesha' (make carry). In agreement with our observation in chapter 2, Comrie notes that the causative morpheme is quite productive across languages (Comrie, Ibid).

Morphological causatives are said to be typical of agglutinative languages like Gikūyū.

#### 4.2.0 THE CAUSATIVE CONSTRUCTION IN GIKŪYŪ.

In Gikūyū, causation can be marked either periphrastically or morphologically.

In the former, the causing verb is 'tūm-' (cause) as in:

(4) Aratūmire ngwe (He caused me to fall).

The causing event is in the first predicate which is the first word (*tũmire*) while the effect event is the second word (*ngwe*). However, the typical way of signalling causation is through affixation.

According to Benson (1964) and Gathenji (1981), there are two causative morphemes in Gikũyũ. These are *-i-* and *-ithi-* e.g. *'in-a'* (swing/sing) -> *'in-i-a'* (make swing/cause to dance) -> *'haat-a* (sweep) -> *'haat-ithi-a'* (make sweep). Both Benson and Gathenji refer to *-ithi-* as the double causative presumably because it combines *-i-* and *-ith-*. In this work however, we feel that the term is inappropriate because *-ith-* on its own is not a causative morpheme and therefore the question of double causative does not arise. The term 'double causative' will be used to refer to the occurrence of two causative *-ithi-* morphemes as in *'gũ-ithi-ithi-a'* (make somebody to cause something/body to fall).

We have noted in chapter 2 that there are syntactic differences, between *-i-* and *-ithi-*. *-ithi-* occurs with all verb types e.g. *'andĩk-ithi-a'* - write (dynamic transitive), *'men-ithi-a'* - cause to hate (stative transitive), *'ken-ithi-a'* - cause to be happy (stative intransitive), *'inam-ithi-a'* - cause to bend (dynamic intransitive), *'cam-ithi-a'* - cause to taste (transitive/intransitive). This means that it is highly productive. *-i-* is not as productive since it does not occur with transitive verbs e.g. \* *'andĩk-i-a'* - (cause to write)<sup>1</sup>. With the intransitives and the intransitive/transitive it is highly productive.

#### 4.2.1 THE SYNTACTIC EFFECT OF THE CAUSATIVE MORPHEME

Syntactically, the affixation of either *-i-* or *-ithi-* introduces a new participant absent in

<sup>1</sup> Except in the rare cases where the causative verb has a benefactive interpretation e.g. *'rũmia'* -(allow to bite)

the non-causative construction. That is, if the number of participants in the base construction is X, that of the causative one is X + 1. Hence, intransitive verbs become monotransitive, monotransitive become ditransitive while the ditransitive become 'tritransitive'. The sentences below exemplify this:

(5a) Mwana nīatheka.

Mwana nī-a-a-thek-a.

Child foc-sub-tns-laugh-fv.

The has child laughed.

(5b) Njeri nīathekia mwana.

Njeri nī-a-a-thek-i-a mwana.

Njeri foc-sub-tns-laugh-caus-fv child.

Njeri has caused the child to laugh.

(6a) Mary nīaruga irio.

Mary nī-a-a-rug-a irio.

Mary foc-sub-tns-cook-fv.

Mary has cooked food.

(6b) John nīarugithia Mary irio.

John nī-a-a-rug-ithi-a Mary irio.

John foc-sub-tns-cook-caus-fv Mary food.

John has made/forced Mary (to) cook food.

(7a) Mūbīya nīahee ciana irio.

Mūbīya nī-a-a-he-e ciana irio.

The priest foc-sub-tns-give-fv children food.

The priest has given the child food.

(7b) Kanitha nīyaheithia mūbīya ciana irio.

Kanitha nī-ī-a-he-ithi-a mūbīya ciana irio.

Church foc-sub-tns-give-caus-fv priest children food.

The church has made/forced the priest (to) give the children food.

In the above examples, the intransitive 5(a) becomes transitive in 5(b) after causativization since the object 'mwana' - (child) has been introduced. The monotransitive 6(a) becomes ditransitive in 6(b) after taking the additional object 'Mary'. The ditransitive 7(a) becomes 'tritransitive' in 7(b). The participant introduced by the insertion of the causative is called the 'causer' and expresses the thing or person responsible for bringing about the action or state denoted by the verb.

In all the causative sentences, the newly introduced nominals occupy subject position. In each case, the subject of the non-causative sentence appears post-verbally in a causative construction and is referred to as the 'causee' because it suffers the action or state identified by the verb (Comrie 1981). For example, 'mwana' -(child) in 5(a) is the subject of the non-causative sentence but in the causative 5(b), it is an object. In the same sentence, a new subject,

'Njeri' is introduced and functions as the causer for it instigates the action named by the verb.

The fact that the insertion of the causative morpheme triggers syntactic ripples is proof that morphology and syntax can not be divorced from each other.

#### 4.2.2 THE SEMANTICS OF THE CAUSATIVE VERB

Before discussing the meanings associated with the causative morphemes *-i-* and *-ithi-* it is necessary to briefly look at the general meanings of the causative in English as expounded by Givon (1975:325-331). He looks at causation in terms of control or deliberateness mainly on the part of the causer and sometimes on the part of the causee. That is, is the action performed by the causer deliberate/intentional? He observes that participants in a causation chain are placed in a hierarchy and only one of them has control (typically the causer). The causee only assumes control if the causer has no control. He identifies three general interpretations that can be read in a causative situation:

- (a) Cause somebody/thing to do something.
- (b) Force/make somebody (to) do something.
- (c) Have somebody do something to somebody else.

He claims that while 'cause' is a non-control/accidental verb involving non-coercive manipulation, 'make' is a direct control and 'have' a mediated control verb. The latter two involve coercive manipulation.

We now turn to the meanings of the Gikūyū causative. The meaning of 'tūma'-(cause) is

non-coercive. However, in Gikũyũ unlike in English, the causation may or may not involve control on the part of the causer. Consider the example below:

(8) Ciana nĩciarakaria mwarimũ (ikiĩendaga/itekwenda).

Ciana nĩ-ci-a-rakar-i-a mwarimũ (ikiĩendaga/itekwenda).

The children foc-sub-tns-be annoyed-caus-fv teacher

(willingly/unwillingly).

The children (willingly/unwillingly) have caused the teacher to be annoyed.

We say there is no coercion since it is not possible to force somebody to be annoyed (or to be in any state for that matter). The children's action could have been deliberate (hence control) or inadvertent (hence no control). This is attested to by the fact that we can end (8) above with either 'willingly' or 'unwillingly'. Basically, it is the -i- causative that is used with the non-coercive meaning as we saw in chapter 2. We saw also in the same chapter that -ithi- entails coercion<sup>2</sup>. If the coercion is direct, the causer, which must be agentive, forces the causee (also human) to perform a certain act. In such cases, it is -ithi- and not -i- that is used. e.g.

(9) Mwarimũ nĩateng'erithia ciana.

Mwarimũ nĩ-a-a-teng'er-ithi-a ciana.

Teacher foc-sub-tns-run-caus-fv children.

The teacher has made/forced the children (to) run.

If 'ciana' (children) were to be replaced by a non-agentive noun like 'ibuku' (book), the

<sup>2</sup>The only exception to this applies to a few verbs like 'gũa' (fall) and 'mena' (hate) which do not accept the -i- and therefore take -ithi- even with the non-coercive meaning.

sentence would be ill-formed since one can not force an inanimate to do anything. Likewise, 'mwarimũ' (teacher) is not replaceable with a non-agentive like 'mbica' (picture) which is incapable of carrying out the coercion. This makes an interesting contrast to the -i- causative which allows either an agentive or a non-agentive causer with some verbs as in 10(a) and 10(b) respectively:

(10a) Mwarimũ nĩathekia ciana.

Mwarimũ nĩ-a-a-thek-i-a ciana.

Teacher foc-sub-tns-laugh-caus-fv children.

The teacher has caused the children to laugh.

(10b) Mbica nĩyathekia ciana.

Mbica nĩ-i-a-thek-i-a ciana.

The picture foc-sub-tns-laugh-caus-fv children.

The picture has caused the children to laugh.

The two sentences above are admissible because the causation is non-coercive. However, whether a non-agentive causer is allowed depends on the semantics of the verb. For example, a verb of motion such as 'teng'era'- (run) must have an agentive causer<sup>3</sup>. e.g.

(11) Mwarimũ nĩateng'eria ciana.

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<sup>3</sup>If a non-agentive one (e.g. 'thĩna'-poverty) was used, the meaning would be figurative.

Mwarimũ nĩ-a-a-teng'er-i-a ciana.

Teacher foc-sub-tns-run-caus-fv children.

The teacher has caused the children to run.

The interpretation of this sentence is that the children have a choice between running and not running (hence no coercion on the part of the teacher). This is unlike in (9) where they have no option but to run since they are being forced to. These two contrasting examples therefore reinforce our assertion that *-i-* is used in non-coercive causation while the reverse happens with *-ithi-*.

It can also happen that the coercion is directed at self, meaning that the causer and the causee are coreferents as in (12).

(12a) Mary nĩerakarithia.

Mary nĩ-a-a-ĩ-rakar-ithi-a.

Mary foc-sub-tns-refl-be annoyed-caus-fv.

Mary has made/forced herself (to) be annoyed./Mary has pretended to be annoyed.

Here, Mary is forcing herself into a state (being annoyed) unnaturally. In other words, the annoyance is simulated. Mary is the causer and the causee simultaneously. The reflexive *'-i-*' stands for the causee and is placed between tense and the root verb. This means that it behaves like an object pronoun. This is not surprising given that the causee occupies object position in morphological causatives. This meaning of self-coercion is practically possible with all verbs. Although *-i-* can also be used in constructions in which the causer and causee are co-referential,

the meaning is no longer that of self-coercion but of insidious occurrence (hence no coercion).

e.g.

(12b) Kūgūrū nīkwerwaria.

Kūgūrū nī-kū-a-ī-rwar-i-a.

Leg foc-sub-tns-refl- be sick-caus-fv.

The leg caused itself to be sick./became sick without cause.

The final type of causative we wish to consider involves mediated or indirect coercion. In such constructions, the causee is normally omitted but is retrievable. The difference between this type of coercion and the direct one, as we saw in section 2.3.2, is the positioning of the post verbal nominals. Only -ithi- is used with this meaning. Consider:

(13a) Njeri nīaruma Mary.

Njeri nī-a-a-rum-a Mary.

Njeri foc-sub-tns-abuse-fv Mary.

Njeri has abused Mary.

(13b) John nīarumithia Mary.

John nī-a-a-rum-ithi-a Mary.

John foc-sub-tns-abuse-caus-fv Mary.

John had Mary abused.

(13c) John nīarumithia Mary Njeri.

John nī-a-a-rum-ithi-a Mary Njeri.

John foc-sub-tns-abuse-caus-fv Mary Njeri.

- (i) John had Mary abused (by Njeri).
- (ii) John made/forced Mary to abuse Njeri.

13(a) is non-causative but 13(b) is causativized with Mary as the person who experienced the insults (hence experiencer) and not the causee as would be the case in direct coercion. The causee, who did the abusing at the instigation of John, is omitted in 13(b). 13(c) has two readings, the first of which denotes indirect coercion and the second direct coercion. For the indirect meaning, Mary appears adjacent to the verb and is the experiencer while the optional 'Njeri' is the causee and is placed further away from the verb. If the meaning is the direct one, the syntactic configuration remains but the roles are reversed so that now Mary becomes the causee and Njeri the experiencer. Both post verbal nominals are obligatory in this interpretation.

At this juncture, we wish to debunk the assertion in Gathenji (1981) that one of the meanings of the -ithi- causative is 'assist somebody to do something'. Consider (14) below.

(14) John nīarugithia kaana irio.

John nī-a-a-rug-ithi-a kaana irio.

John foc-sub-tns-cook-caus- fv child food.

- (i) John has made/forced the child (to) cook food.
- (ii) John has helped the child cook food.

As we can see from the gloss, there is ambiguity in the interpretation. However, the second one is not causative at all. According to Talmy (1976:47-50) the situations below do not constitute a causative.

- (a) If the event takes place regardless of the action of the newly introduced participant.
- (b) If this participant only affects the characteristics of the event but not its identity.

It is obvious that Mary in (14) would still have cooked even without John's help. John is therefore a facilitator not a causer or initiator of the action.

Although we have established that there are two distinct causative morphemes in Gikũyũ, -i- and -ithi-, we shall consider -ithi- the basic causative morpheme from this point on for the purpose of streamlining our discussion. -ithi- has been chosen because it attaches to all verb types unlike -i- which is a lot less productive. Besides, cross-linguistic evidence reveals that in Bantu, the causative morpheme consists of at least a vowel and a fricative sound e.g. -ish- in Chimwiini and Kiswahili (Marantz, 1984 and Ashton, 1944 respectively), -is- in Tswana and Tsonga (Cooper, 1976 and Matsinhe, 1994 respectively), -ets- in Chichewa (Baker, 1985).

### 4.3.0 THEORETICAL APPROACHES TO THE ANALYSIS OF THE CAUSATIVE CONSTRUCTION

In this section, we consider two theoretical approaches to the analysis of the causative construction. The theories are: Merger by Marantz (1984) and Incorporation by Baker (1985) both of which handle grammatical changing functions from a syntactic point of view as we have already seen in the theoretical framework. The weaknesses and strengths of the theories in relation to the analysis of the *Gikūyū* are discussed. We begin by looking at the Merger Theory of Marantz (1984).

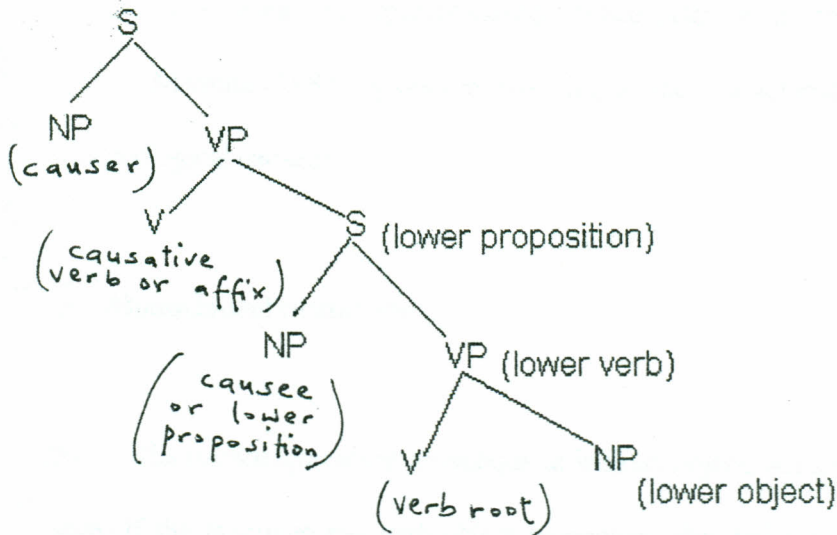
#### 4.3.1 THE MERGER THEORY (MARANTZ, 1984)

Marantz deals with causative constructions which are derived by a productive morphological process. He says that although one clause appears on the surface, there are actually two underlying clauses. According to him, the basic meaning of a causative is that the causer caused the causee 'S' -where 'S' stands for a certain proposition e.g. to eat food (1984: 261).

The theory has three levels of analyses namely: L-S (logical Semantic), S (syntactic structure) and surface structure. The purpose of the L-S is to assign theta roles and impose constraints on semantic relations. One such constraint is that a given constituent is only permitted to carry one semantic/theta role (e.g. agent, theme) and can serve as an argument to only one lexical item. These lexical items could either be affixes or verb roots. The constraints ensure that a particular argument can not serve as the agent and theme of a lexical item at the

same time.

Marantz claims that all languages have the following L - S structure for causative constructions.



(Marantz, 1984: 262)

Here, the lower proposition is the logical object of the causative verb or affix. The theory also accommodates those languages that have the lower predicate as the logical object of the affix. It assumes that the lexical entry of a causative affix is the same as that of 'make' in English hence, 'cause' (caused) (+log sub) (+ transitive) - (Ibid.: 264). The affix therefore introduces an extra argument making intransitive verbs monotransitive and monotransitive ones ditransitive. Both the affix and the main verb are treated as separate lexical items with their own arguments which mainly happen to be propositions (although at times they can be predicates or modifiers).

Since the verb and the affix appear joint at the surface structure, it means that they must have merged at some level. Determining the level at which merger takes place is crucial in this

theory because one level results in monoclausal causatives while the other yields biclausal causatives. The theory predicts that in languages that obey Comrie's (1981) 'paradigm case', merger takes place at L-S meaning that at the S level, there is only one clause and hence the term monoclausal causatives. In other languages however, merger is delayed until the S level thereby occasioning two separate clauses (hence biclausal causative constructions).

Marantz (1984) gives the following as the characteristic features of the two types of morphological causatives.

**(a) Monoclausal causatives .**

- (i) The causee appears as an oblique or indirect object, not as the direct object of the derived verb. If the language has verb-object agreement, the derived verb will agree with the lower object, not with the causee.
- (ii) If the lower object is a reflexive, it may only take the matrix subject as antecedent, not the underlying lower subject.
- (iii) If the causative is passivized, the object, not the causee, is promoted to become the matrix subject.

**(b) Biclausal causatives**

- (i) The causee appears as the direct object of the derived matrix verb. The lower object appears either as a 'frozen' 2nd direct object or receives an oblique case marking. If the language has verb-object agreement, the derived verb will agree with the causee and not the lower object.

(ii) If the lower object is a reflexive, it may only take the causee, or lower subject, as antecedent, not the matrix subject.

(iii) If the causative is passivized, the causee, and not the lower object, is promoted to become the matrix subject.

Having highlighted the salient points of the Merger Theory, we now apply it to the Gikuyu causative.

#### 4.3.2 THE GĪKŪYŪ CAUSATIVE IN THE MERGER THEORY

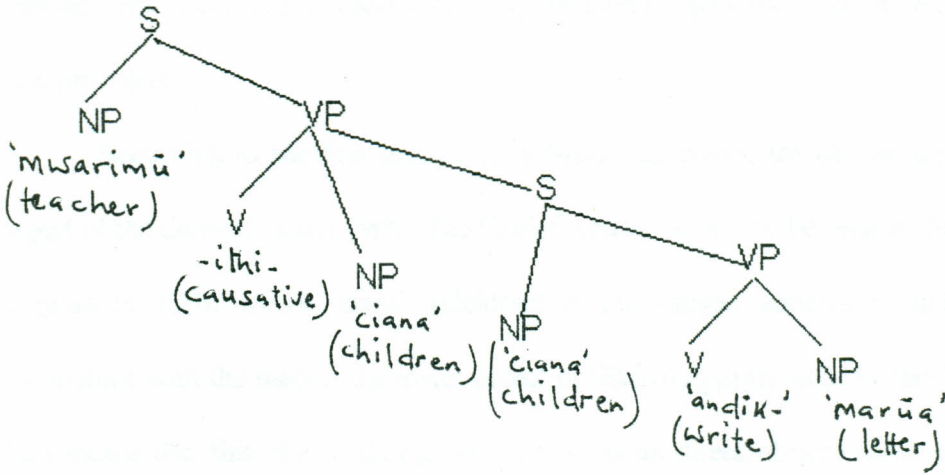
Our task now is to determine whether the GĪkŭyũ causative is monoclausal or biclausal. To do this, we shall test it against the features associated with each type as laid out above. As stated earlier, in a biclausal analysis merger, doesn't take place until S level thus giving rise to two S levels:

1. Pre-merger with two clauses (upper and lower proposition).
2. Post-merger with the affix and the verb root merged.

The GĪkŭyũ causative affix, -ithi-, has the same lexical entry as 'make' in English. That is, both are [+log sub ] [+transitive ] meaning that they have a subject and an object. The diagram below shows how the pre-merger and post-merger S level would look like respectively:

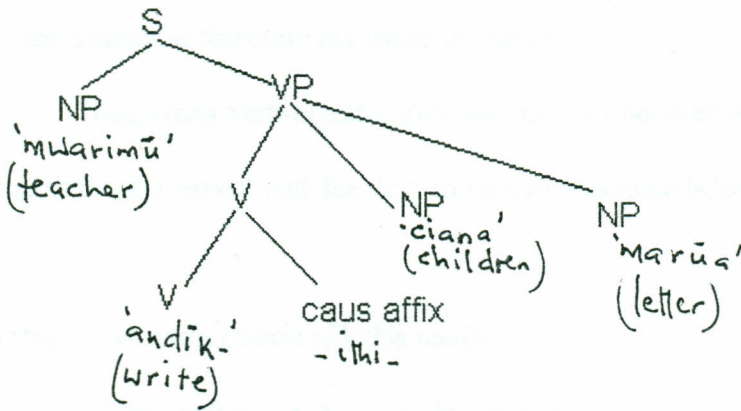
PRE-MERGER

(15a)



## POST-MERGER

(15a)



The theory states that the role of the S level is to assign syntactic roles corresponding to the semantic ones at L-S. These syntactic roles are: subject of a predicate, direct object of the verb, second object of the verb, object of a preposition etc. In the pre-merger diagram above,

`ciana'-(children) is the object of -ithi- and at the same time the subject of the lower verb `andik- (write). The post-merger diagram above shows that `mwarimū'-(teacher) is the subject of the derived verb `andik-ithi-', `caina' (children) the direct object and `Marūa' (letter) the second or indirect object.

According to the first feature of biclausal causatives, the causee appears as the direct object of the derived matrix verb. The Gikūyū causative, as can be seen in the post-merger tree diagram in 15(b) where `ciana'- (children) is the causee, adheres to this requirement. In accordance with the theory, the lower object in Gikūyū appears as a 'frozen' 2nd direct object. This means that this object, though present, loses its direct object characteristics such as the ability to become subject in passive constructions. The second object is said to receive oblique case. We note that this is not relevant for Gikūyū which does not mark abstract case (Harford-Perez, 1984). The term 'second direct object' also raises concern since Gikūyū doesn't allow doubling of the direct object position as we shall see later in this chapter (also see section 3.4.2). This criterion is therefore not useful in Gikūyū.

Regarding verb-object agreement, Gikūyū behaves as predicted. It is the causee that marks this agreement with the derived verb as illustrated below:

(16a). Mwarimū nīaciandikithia marūa.

Mwarimū nī-a-a-ci-andik-ithi-a marūa

Teacher foc-sub-tns-om (them-children)-write-caus-fv letters

The teacher has made them write letters.

In 16(a) above, the object marker -ci-, which stands for the causee `ciana'-(children) in 15(b), marks agreement between `caina' (children) and the verb causative `andikithia' (make write). Ill-

formedness would result if agreement is between the causative verb and 'marūa'-(letter) as indicated below:

16(b) \*Marūa nīmandikithio ciana

Marūa nī-ma-a-andik-ithi-o ciana

Letters foc-sub-tns-write-caus-pas

The letters have been made to be written by the children

The second feature that is characteristic of biclausal causatives concerns the reflexive. In a biclausal analysis, a reflexive lower object takes the causee as antecedent. Since antecedents can only be subjects, this means that the causee is the subject of the lower clause (implying that there is an upper clause). The causee and the lower object have an anaphor antecedent relationship since they are clause-bound.

In relation to Gikūyū however, the lower object can not be realized as a reflexive either morphologically or lexically. What is evident in Gikūyū are morphological reflexives and they surface as causees, not lower objects. Consider 17(a) below.

17(a) Mary nīerugithia irio

Mary nī-a-a-i-rug-ithi-a irio

Mary foc-sub-tns-refl-cook-caus-fv food

Mary has made/forced herself (to) cook food/has pretended to cook food.

This sentence is equivalent to the repetitious one below which, though non-occurrent in the language, is ostensibly constructed for the sake of illustration.

17 (b) \*Mary nĩarugithia Mary irio.

Mary nĩ-a-a-rug-ithi-a Mary irio

Mary foc-sub-tns-cook-caus-fv Mary food

Mary has made/forced Mary (to) cook food.

In 17 (b), the two 'Marys', the first being the causer and the second the causee, refer to the same person. 17(a) avoids this repetition by using the reflexive morpheme '-e-' to stand for the causee. Here, we note that the only reflexive-antecedent relationship possible in Gikũyũ causative constructions is that between the causer and the causee. Thus, there is no evidence that a lower clause does exist.

The third feature of a biclausal causatives concerns the ability of the cause to become the subject in a passive sentence. Here, we find that Gikũyũ fits the description. When a causative is passivized, the causee, and not the lower object, becomes the subject as shown in 18(a) below:

18(a) Mwarimũ nĩandikithia ciana marũa

Mwarimũ nĩ-a-a-andik-ithi-a ciana marũa

Teacher foc-sub-write-caus-fv children letters

The teacher has made/forced the children (to) write letters.

18(b) Ciana nĩciandikithio marũa nĩ mwarimũ

Ciana nĩ-ci-a-andik-ithi-o marũa nĩ mwarimũ

Children foc-tns-write-caus-pas letters by teacher

Children have been/forced (to) write letters by the teacher.

18(a) shows 'ciana'- (children) as the causee while the passivized 18(b) has this causee as the matrix subject. This is in line with Comrie's (1981) hierarchy where the causee is ranked higher than the lower object in biclausal causative constructions.

From the foregoing, we see that a biclausal analysis for Gikũyũ is appropriate in some respects but not in others. We have seen that in accordance with the theory, the causee in Gikũyũ becomes the object and therefore marks verb-object agreement with the verb. It also becomes the subject of the corresponding passive construction.

However we have also established that the reflexive morpheme does not appear as the lower object. In the Merger Theory, whether a causative is mono or biclausal is really determined by this reflexive feature. For there to be two clauses, there should be two subjects and two objects. That is, a matrix subject and lower subject, a matrix object and a lower object. In such cases, the reflexive, which surfaces as the lower object, takes the lower subject (causee) as antecedent since the two are in the same lower clause (note that only subjects can serve as antecedents of reflexives). Since Gikũyũ reflexives are causees rather than lower objects, we do not have evidence that there are two clauses. In addition, the causee appears to have object rather than subject features<sup>1</sup>

Besides, the theory postulates that merger collapses the causative affix and the verb root to form one derived verb. Marantz does not show that for this to take place at the S level, there must be movement of the verb root from its position in the lower clause to merge with the affix in the

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<sup>1</sup> Subject features include being positioned before the verb and marking agreement with the verb.

upper clause. In line with syntactic theories of which Merger is one, this movement should leave a trace behind so that the lower object does not become stranded (due to lack a governor). Since no mention of a trace is made, merger at S fails to obey the constraints imposed by syntactic movements.

In view of the above limitations, the next question becomes whether merger in Gikūyū takes place at L-S (hence monoclausal) where traces are not required. According to the first feature of monoclausal causatives, the causee is supposed to surface as an oblique or indirect object. On the contrary, the causee in Gikūyū necessarily appears as the direct object as 19(a) shows:

19(a) Mwarimū niandikithia ciana marūa

Mwarimū ni-a-a-andik-ithi-a ciana marūa

Teacher foc-sub-tns-written-caus-fv children letters

The teacher has made /forced the children (to) write letters.

19(b) \*Mwarimū niandikithia marūa ciana

Mwarimū ni-a-a-andik-ithi-a marūa ciana

Teacher foc-sub-tns-caus-fv letters children

The teacher has made/ forced the letters (to) write children.

19(b) is ill-formed because the lower object is placed in the direct object position, a slot reversed for the causee.

Besides, it is not the second object, 'marūa'-(letters) in the case of 19(a) above, that marks agreement with the derived verb as the theory predicts. Rather, it is the causee, 'ciana' –

(children) in 19(a), that does so. The examples below show this:

(20a) Mwarimũ nīaciandīkithia marũa

Mwarimũ nī-a-a-ci-andīk-ithi-a marũa

Teacher foc-sub-tns-om(them-children)-write-caus-fv letters

The teacher has made them write letters.

(20b) \*Mwarimũ nīamandīkithia ciana

Mwarimũ nī-a-a- ma-andik-ithi-a ciana

Teacher foc-sub-tns-om (it-letter)-write-caus-fv children

The teacher has made/forced them (letters) (to) write the children.

20(a), in which the causee marks agreement with the derived verb, is well-formed but not 20(b) in which agreement is between the lower object and the derived verb.

If merger were to take place at L-S, we would only have one clause at S level meaning that a reflexive lower object could take the matrix subject as its antecedent since the two would be in one clause. The causee would be an object in such a clause and thus non-antecedent materia. But as already stated, reflexives do not surface as lower objects in Gikũyũ; a fact that renders this feature inapplicable.

According to the third feature, the lower object is expected to be the subject of a passivized causative. This does not happen in Gikũyũ as the ill-formed 21 whose non-passive form is 19(a), illustrates:

(21) Marũa nīmandikithio ciana nī mwarimũ

Maṛūa nī-ma-a-andik-ithi-o ciana nī mwarimū

Letters foc-sub-tns-write-caus-pas children by teacher.

Letters have been made/forced (to) write the children by the teacher.

As we saw in 18(b), it is the causee that becomes subjectivized in such instances. Apparently, none of the three features explicated above support a monoclaused analysis for the Gikūyū causative.

Our conclusion from the foregoing is that there is no theory-neutral way of proving that we have two clauses (biclausal) in a Gikūyū causative. Likewise, the analysis proposed for monoclausal causatives is not suitable for Gikūyū. Modification of the Merger Theory to cater for the Gikūyū data is outside the scope of this chapter. We shall therefore move on to the Incorporation Theory of Baker (1985).

#### 4.4.0 AN OVERVIEW OF INCORPORATION THEORY (BAKER, 1985)

Like Marantz (1984), Baker (1985) begins on the premise that morphological causative constructions present one clause on the surface but are actually biclausal semantically and in the underlying syntactic structure. By way of illustration, let us consider the following examples given by Baker (Ibid.: 205)

(22a) Mtsikana ana-gw-ets-a mtsuko

Girl agr-fall-made waterpot

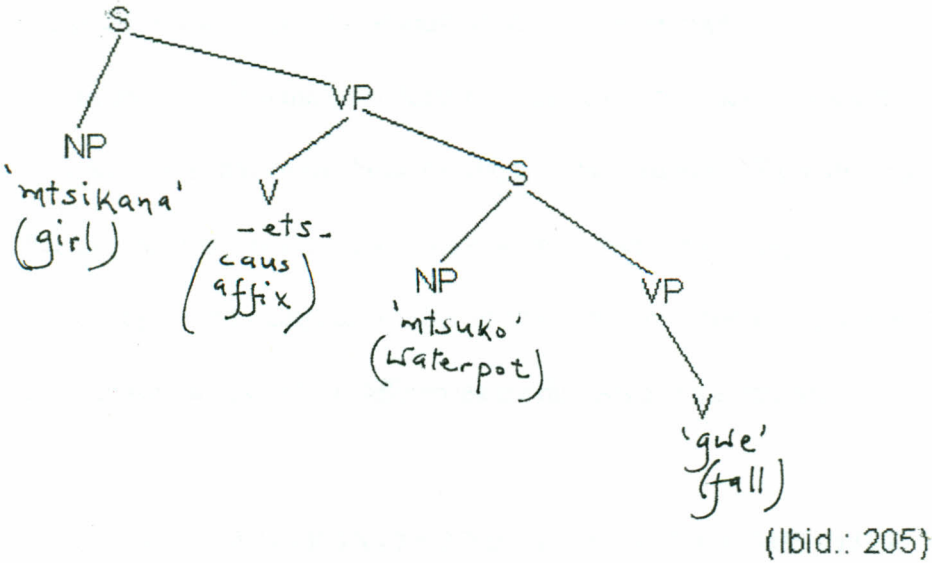
'The water made the waterpot fall!'

The above morphological causative, though seemingly monoclausal, has the following two underlying propositions .

(22b) Mtsikana anachititsa/kuti mtsuko unagwe

'Girl make/that waterpot fall'.

Going by the Uniformity of Theta Assignment Hypothesis (UTAH) according to which underived verbs have the same argument structure as their derived counterparts, 22(a) and 22(b) are thematic paraphrases because corresponding arguments get the same theta assignors in both sentences. A simple D-structure representing both 22(a) and 22(b) is given below:



In this diagram, the causative affix, considered a lexical item within the theory, subcategorizes for an external argument ('girl' in our case) and a propositional direct object (embedded clause), which names the event or state that is caused.

Naturally, the next concern of the theory is why and how the causative affix adjoins to the root verb to form a derived verb. Borrowing from Lieber's (1980) *Theory of Morphology*, Baker sees a causative affix as having a morphological subcategorization frame which determines or specifies what a given affix can attach to. Baker goes on to say that this frame must be satisfied at some level of derivation and proposes the following principle:

Stray Affix Filter

\*X if X is a lexical item whose morphological subcategorizational frame is not satisfied at S-structure (Ibid: :225).

Simply put, an affix must attach to a root at S-structure. Because 'this is the level that feeds the phonological interpretative component, and the property of being an affix is clearly a morphological one' (Baker, 1985: 225. In other words, since the causative affix can not stand independently at s-structure, it must attach to a verbal root.

In order to obey the stray Affix Filter principle, the root verb is syntactically moved from its base position in the lower clause to adjoin to the causative affix in the matrix clause. Baker calls this process verb incorporation because the lower verb incorporates into the causative affix. According to him, languages differ in their verb incorporation patterns thus yielding different types of causatives. These differences are discussed in the next section.

#### 4.4.1 CAUSATIVE TYPES AND THE GĪKŪYŪ CAUSATIVE

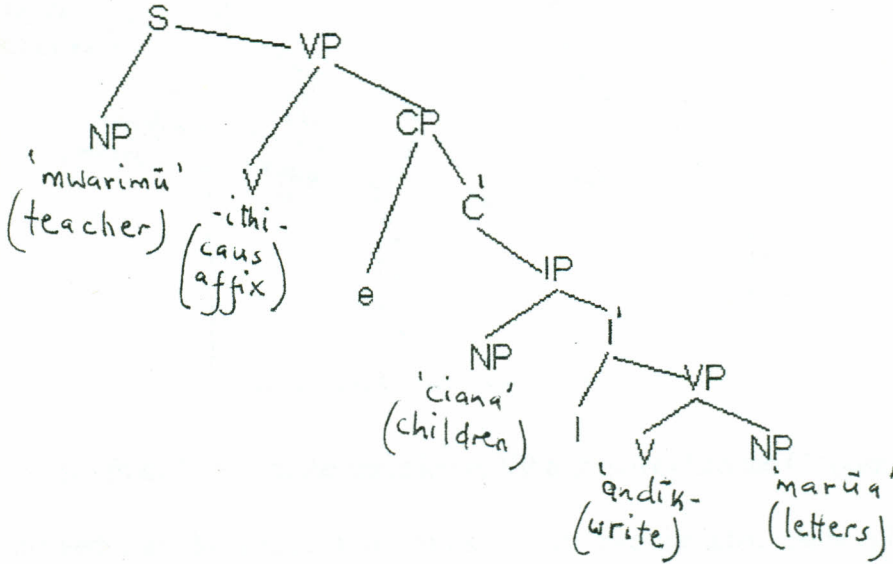
Before looking at the types of causative constructions evident in languages, Baker (1995) points out that all languages causativize in the same way when the embedded verb is intransitive. In such cases, the subject of the embedded clause automatically becomes the object of the

derived verb. For example, in 22(c), 'mtsuko' -(water pot) is the subject of the lower clause but in the S-structure in 22(a), it becomes the object of the derived verb. Causativised intransitive verbs are therefore not relevant in determining different causative types. This is unlike their transitive counterparts.

When dealing with transitive verbs, the key question is, if the embedded clause has a subject and an object, which one becomes the object of the derived verb? Drawing from existing literature such as Trithart (1977) and Marantz (1984), Baker states that in some languages, the subject of the embedded clause (causee) becomes the direct object of the derived verb while its object becomes a second object. In other languages however, the status of the direct object of a derived verb is held by the object of the embedded clause while the causee appears as an oblique-argument. Typically these are the two types of causative constructions according to Baker.

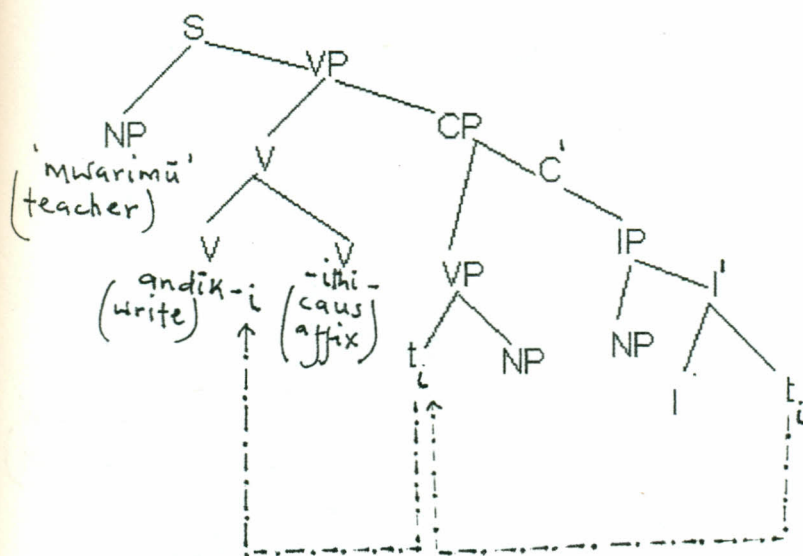
The claim of the theory is that the two types differ in their formation. We shall now look at this difference and establish where the Gikūyū causative falls. To Baker, there are two ways of achieving verb incorporation. One is to move the lower verb alone to a position within the incorporating range of the causative affix and the other is to move the entire lower VP (verb plus object) into a similar position for the purpose of incorporation. Such a position must be governed by the matrix verb since incorporation only takes place under government. That is a lexical item can only incorporate another lexical item if it governs it. In 23(a) below we present an elaborate D-structure diagram to elucidate our point.

(23a)



If the entire VP of the embedded clause is translocated, it has to move cyclically in order to access the matrix verb. That is, there will be two subsequent stages of movement the first of which involves the whole VP(verb plus object) while the second only involves the embedded verb. This is portrayed diagrammatically in 23 (b).

(23b)



We see from 23(b) that the entire lower VP first moves into the CP position and from there only the verb (*andika*'-write) moves to incorporate into the affix. Although this movement obeys government relations by virtue of the fact that the moved VP governs its trace in the embedded clause and is itself governed by the matrix verb, we note that it places the lower object 'marũa' - (letter) in the direct object position. This gives rise to the following ill-formed sentence.

(23c) \* Mwarimũ niandikithia marũa ciana

Mwarimũ ni-ũ-andik-thi-a marũa ciana

Teacher foc-sub-tns-write-caus-fv letter children

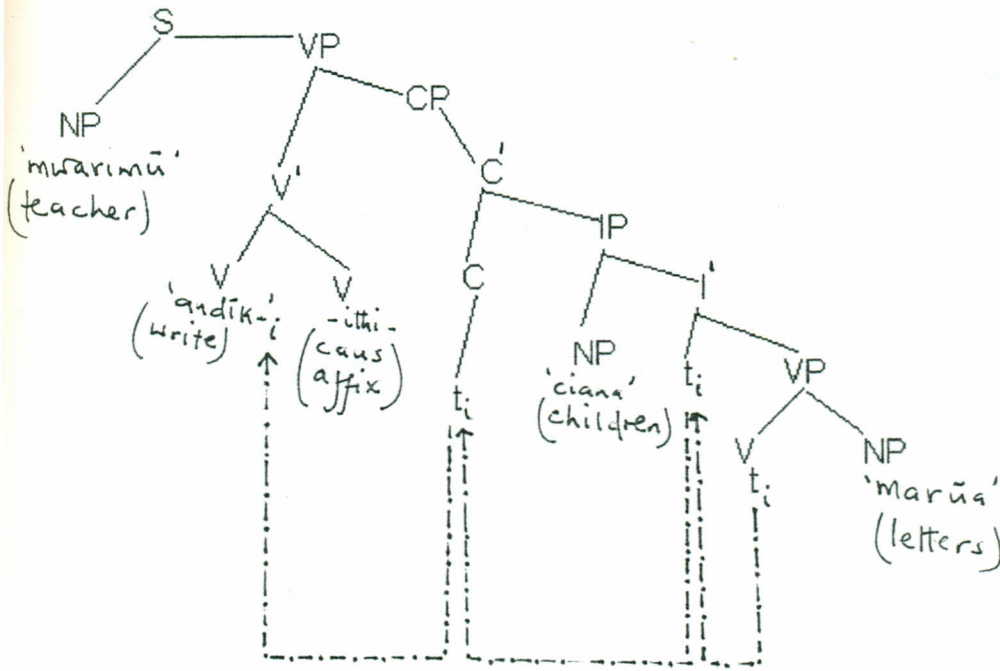
The teacher has made/forced the letter (to) write children.

The causee, 'ciana'-(children), has been relegated to the position of the second object and this is not acceptable for it is the causee that bears all the direct object features such as the potential to become the subject in a passive sentence.

From the above, the Gikũyũ causative cannot be explained in terms of the movement involving

the entire lower VP. This leads us to the alternative movement where only the lower verb is moved. We provide a diagrammatic example in 23(d) which is derived from 23(a).

(23d)



To get the derived verb above ('andikithia'-make write) the lower V (not the whole VP) moves in a series of small steps in order to obey both government and binding and is eventually incorporated into the causative affix. This movement places the causee in the right position - that of direct object of the derived verb and thus produces the kind of causative evident in Gikūyū.

However, we cannot find language-internal evidence to prove that the verb 'andika'-(write) actually originates from an embedded VP position (hence two clauses) and cyclically moves from I to C before incorporating into the causative affix. Even Baker fails to show that Chimwiini causatives undergo the said stages of derivation<sup>2</sup>. It would therefore appear that the 'hops' proposed by the theory are meant to satisfy the Government-Binding theory rather than

describe attested phenomenon in the language.

In Incorporation Theory, the two patterns of verb incorporation discussed above are also motivated by case assignment.<sup>3</sup> Case Filter demands that every NP must be assigned abstract case so that it becomes visible for theta-role assignment (an argument cannot receive a theta role if it does not have abstract case already). This would explain why in a language like Chichewa, the entire VP is moved. If the lower object did not move along with the verb, then it would remain in the embedded clause without case. This is because verbs in this language do not assign two accusative cases or any inherent case. As such, the lower object has no way of getting structural case (accusative in this instance) since it is not adjacent to the derived verb.

It therefore moves together with the lower verb into the CP position from where it receives the accusative case from the derived verb by virtue of adjacency to this verb. The causee receives a special case from a preposition which is introduced solely for this purpose as in the following example (Baker, *Ibid.* : 236).

- 24) Anyani a-na-wa-meny-ets-a ana kwa buluzi  
 Baboons sp-past-op-hit-caus-asp children to lizard  
 The baboons made the lizard hit the children.

Unlike Chichewa, languages which only move the lower verb are either capable of assigning two accusative cases or one accusative case and one inherent one. Kinyarwanda is an example of the former while Chimwiini exemplifies the latter.

Evidence shows that Gikūyū is more akin to Chimwiini than Kinyarwanda. This

<sup>2</sup>Baker bases his claims on the analysis of Chimwiini, a Bantu language.

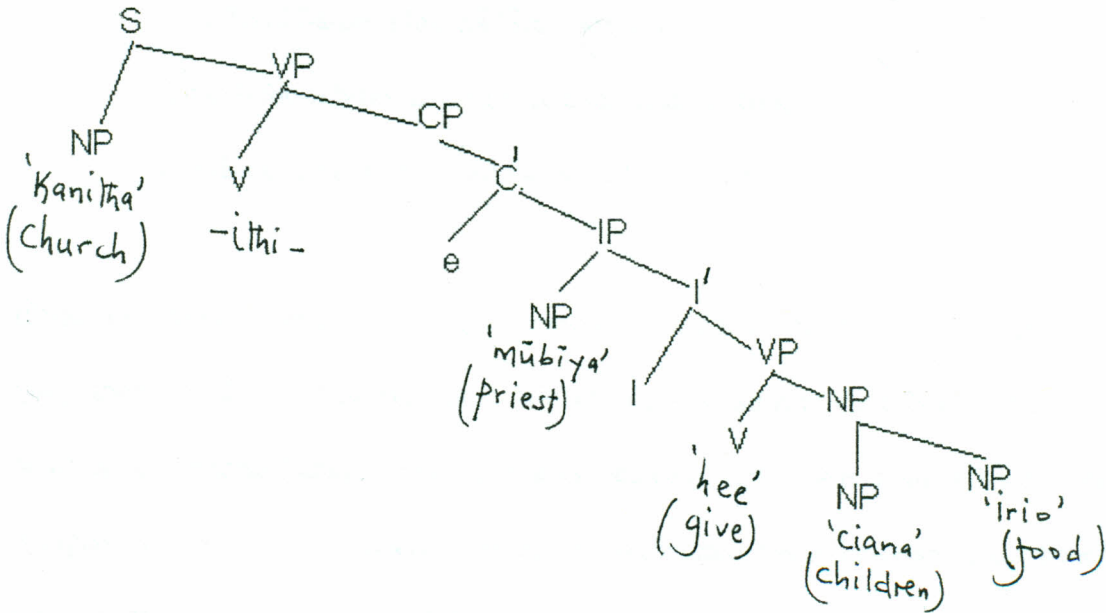
<sup>3</sup>Baker makes use of marked case since unmarked case is problematic for his analysis).

follows from the fact that Gikūyū is not a double direct object language, a characteristic feature that makes it possible for Kinyarwanda verbs to assign two accusative cases. Following Baker's argument, the causee in Gikūyū would get the accusative case courtesy of adjacency to the derived verb while the lower object (theme) would receive the inherent case associated with themes.

We note that in Kinyarwanda, the thesis that the derived verb assigns two accusative cases - one to the causee and the other to the lower object, can be validated by the fact that two nominals have direct object properties simultaneously<sup>4</sup>. In Gikūyū however, we have no data-backed way of proving that the lower object does indeed receive the said inherent case.

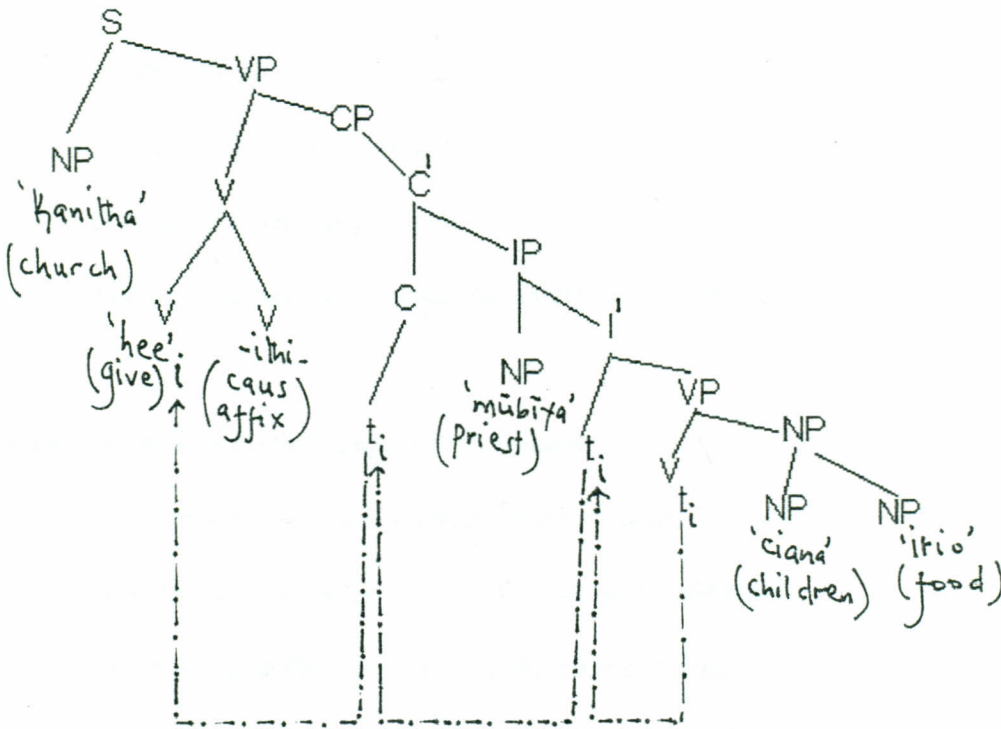
Moreover, it is not clear to us how the theory would handle embedded ditransitive verbs in relation to case assignment. We have in mind a structure such as (25) below:

(25a)



<sup>4</sup>See Baker (1985:251) for exemplification.

(25b)



(25c)

Kanitha niyaheithia mubiya ciana irio

Kanitha ni-i-a-hee-ithi-a mubiya ciana irio

Church foc-sub-tns-give-caus-fv priest children food.

The church has made/forced the priest (to) give the children food.

If 'mubiya'-(priest) receives the structural accusative case from the derived verb (heithia - make give), then the inherent case will go to 'irio'-(food) because it is the theme. This leaves the benefactive argument ('ciana' - children) unassigned case - unless it is argued that the language is capable of assigning two inherent cases, one to the theme and the other to the benefactive nominal. Such an argument wouldn't find data-motivated support however.

The theory would also face a similar problem in accounting for double causatives. As we saw

in section 4.2, this study uses the term double causative to refer to the occurrence of the causative morpheme twice in the same verb. Consider the following examples.

(26a) Nyabara n̄yatũithia andũ macani

Nyabara n̄-ĩ-a-tu-ithi-a andũ macani

Foreman foc-sub-tns-pick-caus-fv people tea

The foreman has made\forced the people (to) to pick tea.

(26b) Munene n̄atuithithia nyabara andũ macani

Munene n̄-a-a-tu-ithi-ithi-a nyabara andũ macani

Boss foc-sub-tns-pick-caus-caus-fv foremen people tea

The boss made the foreman make the people pick tea.

Although Baker (Ibid.:324) acknowledges that structures such as 26(b) are possible and calls the phenomenon 'interaction of verb incorporation with verb incorporation' he does not explain how all the arguments get their cases. Assuming that 'nyabara'-(foreman) gets the accusative case from the derived verb and 'macani'-(tea) gets the inherent case by virtue of being theme, we find that 'andũ'-(people) is without case. This is in violation of the Case Filter principle thereby suggesting that 26(b) is ill-formed and yet it is a possible Gĩkũyũ sentence albeit a marked one. It is an expansion of 26(a).

Another weakness of Baker's account is that it lacks harmony since the different sub-theories he employs give different results. He claims that according to case and Government sub-theories, both types of causatives are monoclausal at S-structure (1985:263). However, according to the Binding sub-theory, a language such as Chimwiini provides evidence that there

are two clauses at S-structure. This evidence comes from the fact that a causee can be an antecedent of a reflexive object -meaning that such a causee has subject qualities despite receiving the accusative case. As we showed in section 4.3.2, this feature is not relevant in Gĩkũyũ because the lower object is never realized as a reflexive item. There is therefore no independent way of proving that Gĩkũyũ, like the otherwise closely-related chimwiini, has biclausal causatives.

To conclude this section, we have seen that the Gĩkũyũ causative is not formed by moving the entire VP to incorporate into the causative affix as claimed by the theory. Although moving the V alone yields the right kind of causative structure in Gĩkũyũ, we have argued that the pattern of movement envisaged by the theory cannot be verified with data. In Gĩkũyũ, it is also not possible to prove that case assignment takes place as postulated by the theory. This is because the language is not morphologically case-marked. Once again, we are not in a position to modify the theory in question in order to accommodate Gĩkũyũ. We shall therefore move on to the next chapter.

## CHAPTER 5

### THE PASSIVE CONSTRUCTION

#### 5.0 INTRODUCTION

This chapter begins by giving a brief overview of the passive construction across languages. It then narrows down to the description of the Gikũyũ passive which is illustrated with a range of sentences constructed with different verb types. The Gikũyũ passive is then analysed using the theories of Merger and Incorporation, thereby determining the adequacy or otherwise of these theories in the description of the Gikũyũ data.

#### 5.1 THE GENERAL CHARACTERISTICS OF THE PASSIVE CONSTRUCTION

According to Keenan (1985), the formation of a passive sentence is a fore-grounding process. This is because it topicalizes an otherwise background nominal. Typically, the object of the active sentence is brought to the subject position in a passive sentence (fore-grounding) while the subject of the active sentence is relegated to an oblique position or is left out altogether (back-grounding). Put differently, the direct object of the active verb is promoted to become subject in a passive sentence while the initial subject is either deleted or demoted to a 'by' phrase (Comrie, 1977). According to Keenan, passive formation takes place at verb-phrase rather than sentence level.

Broadly, two types of passive constructions have been identified across languages. These are:

- (1) personal passives. These are said to be the basic type.
- (2) impersonal passives.

Personal passives are further subcategorized into:

- (i) periphrastic passives. These are passive constructions requiring an auxiliary verb.
- (ii) Strict morphological passives in which no auxiliary verb is needed.

What these two basic passive constructions have in common however, is the fact that they are formed with transitive verbs e.g.

(1a) Okoth scored the goal – active

(1b) The goal was scored by Okoth. –passive

(2a) Kamau nīagūtha mūbira – active

kamau has hit the ball

(2b) Mūbira nīwagūthwo nī kamau –passive

The ball has been hit by Kamau

1(b) is an example of a periphrastic passive sentence while 2(b) illustrates a strict morphological one (meaning that Gikūyū does not use auxiliary verbs in the formation of passive sentences).

The impersonal passive constructions on the other hand can be formed with both transitive and intransitive verbs and are not as widespread as their basic counterparts. Comrie (1977) notes that in impersonal passive sentences, there is a demotion of the subject of the active sentence but no promotion of its object (if there is an object at all).

Typologists have noted that some languages such as English only permit passivization of

transitive verbs while some Bantu languages allow both transitive and intransitive verbs to be passivized. In view of the above, it is fitting that we find out where the Gikūyū language lies in regard to passivization.

## 5.2.0 THE PASSIVE CONSTRUCTION IN GIKŪYŪ.

Gikūyū has both personal and impersonal passive sentences. Both types are formed by a morphological process that suffixes  $-w^{-1}$  between the verb stem and the final vowel. The final vowel invariably changes from 'a' to 'o'<sup>2</sup> in passive sentences. However, if the root or stem ends in a vowel, a situation obtains in which the suffixation of the passive '-ū-' occasions a series of vowels e.g. 'ri-a' (eat)-> 'ri-ū-a'-> 'ri-ū-o'-> 'ri-o' (be eaten). To avoid a vowel cluster such as '-iūo' above, the '-ū-' is dropped but it leaves behind a residue passive effect - of having changed the final vowel from 'a' to 'o'.

In order to discuss the range of passive constructions possible in the language, we shall look at different verb types<sup>3</sup>. Our classification of these verbs is based on the argument structure proposed in Government and Binding (Chomsky, 1981 and 1982). This will help us to classify underived verbs according to the number of arguments they are capable of taking<sup>4</sup>. The resultant types are:

- (1) one-argument verbs (intransitives)
- (2) two-argument verbs (monotransitives)
- (3) three-argument verbs (ditransitives).

<sup>1</sup> This  $-w-$  is derived from an underlying back vowel,  $-ū-$  as we saw in section 2.1.

<sup>2</sup> This may be because the underlying back vowel ( $-ū-$ ) attracts another back vowel ( $-o$ )

<sup>3</sup> We are aware that Gikūyū also has adjectival passives but we shall not discuss them in this work because the phenomena we are dealing with here is strictly verbal. Adjectival passives are discussed in Mwangi (1998).

<sup>4</sup> This classification is finer than the one used to categorize the verbs in the appendices in that the transitive

- (4) argumentless verbs (weather verbs).

We shall now examine the kind of passive sentences formed with the four different types of verbs.

### 5.2.1 INTRANSITIVE (ONE-ARGUMENT) VERBS

The significant characteristic about intransitive verbs is that they have no object to be fore-grounded to subject position. What, therefore, occupies this subject position is a thematically empty pronoun (expletive). Passives formed thus are said to be impersonal because they do not permit referential subjects (those with semantic content). Below, we exemplify this.

- (3a) Cibū nīaria

Cibū nī-a-a-ari-a

Chief foc-sub-tns-speak-fv

The chief has spoken

- (3b) Nīkwario (nī cibū)

Nī-kū-a-ari-o (nī cibū)

Foc-expl-tns-speak-pas (by chief)

There has been spoken (by the chief)

- (3c) Nīkwaria cibū na mūnini wake

Nī-kū-a-ari-a cibū na mūnini wake

Foc-expl-tns-speak-fv chief and assistant his

There has spoken the chief and his assistant <sup>5</sup>

(3d) \*Nīkwaria

Nī-kū-a-ari-a

Foc-exp-tns-speak -fv

There has spoken

(4a) Kaana nīgooka

Kaana nī-ka-a-ūk-a

Child foc-sub-tns-come-fv

The child has come

(4b) Nīguokwo (nī kaana)

Nī-kū-a-ūk-w-o (nī kaana)

Foc-expl-sub-come-pas-fv (by child)

There has been come (by the child)

(4c) Nīguoka kaana

---

<sup>5</sup>Kioko (1994) claims that in Kikamba, verbs such as 'neena'- (talk) do not occur with an expletive subject in their non-passive form. However, this example (3c) shows that this is possible in Gikūyū.

Nĩ-kũ-a-uk-a kaana

Foc-expl-tns-come-fv child

There has come the child

(4d) \*Nĩguoka

Nĩ-kũ-a-uk-a

Foc-expl-tns-come-fv

There has come

3(a) and 4(a), above are both intransitive and underived while 3(b) and 4(b) are their passive counterparts respectively. Here, passivization is only possible because the expletive element, ' -kũ-' in both 3(b) and 4(b), has been introduced. It should be noted that in these two passive examples, the 'by' phrase is optional (hence the parenthesis).

3(c) and 4(c) are intriguing in the sense that though their verbs are underived (non-passive), they too, like 3(b) and 4(b), have expletive subjects. The difference is that while the passive 3(b) and 4(b) may or may not have the subjects<sup>6</sup> of their active counterparts present, 3(c) and 4(c) must have them failing which ill-formedness results as in 3(d) and 4(d). A probable explanation for this is that an underived intransitive verb must have an overt referential argument. Later in this chapter, we will show how the theories explain the well-formedness of the passive sentence such as 3(b) and 4(b) though they may be devoid of overt referential arguments.

In this sub-section, we have shown that intransitive verbs in Gĩkũyũ passivize thus forming impersonal passives. We want to observe however, that there are a few such verbs

which do not passivize e.g.

(5a) Matumbĩ nĩmabutha

Matumbĩ nĩ-ma-a-butha

Eggs foc-sub-tns-rot-fv

Eggs have rotted

(5b) \*Nikwabuthwo (nĩ matumbĩ)

Nĩ-kũ-a-buth-w-o (nĩ matumbĩ)

Foc-expl-tns-rot-pas-fv (by eggs)

There has been rotted (by eggs)

(5c) Nikwabutha matumbĩ maingĩ

Nĩ-kũ-a-buth-a matumbĩ maingĩ

Foc-expl-tns-rot-fv eggs many

There has rotted many eggs - Literal

Many eggs have rotted.

(5d) \*Nikwabutha

Nĩ-kũ-a-buth-a

Foc-epl-tns-rot-fv

There has rotted

---

<sup>6</sup> We have avoided using the term 'agent' because not all such subjects are agentive.

(6a) Nyũmba nĩyahĩa

Nyũmba nĩ-ĩ-a-hĩ-a

House foc-sub-tns-burn-fv

The house has burned down

(6b) \*Nikwahĩo (nĩ nyũmba)

Nĩ-kũ-a-hĩ-o (nĩ nyũmba)

Foc-expl-tns-burn-pas (by house)

There has been burned down (by a house)

(6c) Nikwahĩa nyũmba

Nĩ-kũ-a-hĩ-a nyũmba

Foc-expl-tns-fv house

There has burned down a house - literal

A house has burned down.

(6d) \*Nikwahĩa

Nĩ-kũ-a-hĩ-a

Foc-expl-tns-burn-fv

There has burned down

Examples 5(a) and 6(a) above have underived intransitive stative verbs. The

unacceptable 5(b) and 6(b) indicate that passivization is not possible with these verbs.<sup>7</sup>

### 5.2.2 MONOTRANSITIVE (TWO-ARGUMENT) VERBS

Passives formed from monotransitive base verbs are the commonest in Gikũyũ as in most languages. Typically, the object of the active sentence becomes the subject of the passive sentence and the subject of the active sentence is either left out or relegated to a 'by' phrase. We illustrate this below:

(7a) Mũrutwo ñĩathooma ibuku

Mũrutwo ñĩ-a-a-thooma ibuku

Pupil foc-sub-tns-read-fv book

The pupil has read the book

(7b) Ibuku ñĩĩathoomwo (ñĩ murutwo)

Ibuku ñĩ-ĩ-a-thom-w-o (ñĩ mũrutwo)

Book foc-sub-tns-read-pas-fv (by pupil)

The book has been read (by the pupil)

(7c) Nĩgwathoomwo ibuku (ñĩ mũrutwo)

Nĩ-kũ-a-thoom-w-o ibuku (ñĩ mũrutwo)

Foc-expl-tns-read-pas-fv book (by pupil)

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<sup>7</sup>We will attempt to explain this theoretically later in this chapter. It would therefore be premature to conclude that all stative verbs do not passivize since there are some that do e.g. 'menya'- (know) and 'igua' (hear).

There has been read a book (by the pupil)

- (7d) \*Nĩgwathoma mūrutwo ibuku  
 Nĩ-kũ-a-thom-a mūrutwo ibuku  
 Foc-expl-tns-read-fv pupil book  
 There has read a pupil a book

- (7e) \*Nĩgwathoma  
 Nĩ-kũ-a-thom-a  
 Foc-expl-tns-read-fv  
 There has read

- (8a) Tata nĩagũra nguo  
 Tata nĩ-a-a -gũr-a nguo  
 Aunt foc-sub-tns-buy-fv dress  
 Aunt has bought a dress

- (8b) Nguo nĩyagũrwo (nĩ tata)  
 Nguo nĩ-ĩ-a-gũr-w-o (nĩ tata)  
 Dress foc-sub-tns-buy-pas-fv (by aunt)  
 The dress has been bought (by aunt)

- (8c) Nikwagũrwo nguo (nĩ tata)  
 Nĩ-kũ-a-gũr-w-o nguo (nĩ tata)  
 Foc-expl-tns-buy-pas-fv dress (by aunt)  
 There has been bought a dress (by aunt)

- (8d) \*Nikwagũra tata nguo  
 Nĩ-kũ-a-gũr-a tata nguo  
 Foc-expl-tns-buy-fv aunt-dress  
 There has bought aunt a dress

- (8e) \*Nikwagũra  
 Nĩ-kũ-a-gũr-a  
 Foc-exp-tns-buy-fv  
 There has bought

The transitive verbs in 7(a) and 8(a) are both underived since these two sentences are active. In the basic passives in 7(b) and 8(b), we see that the objects of 7(a) and 8(a) are now the subjects ('ibuku'-book and 'nguo'-dress respectively). The subjects of the active sentences ('murutwo'-pupil and 'tata'-aunt respectively) have become optional 'by'-phrases in the passive 7(b) and 8(b).

7(c) and 8(c) are impersonal passives because their subjects are expletives and not the objects of the active sentences in 7(a) and 8(a). As can be observed, the objects of the active

sentences remain in their post-verbal position. Once again, the agents<sup>8</sup> are optional. With monotransitive verbs, Gikūyū can therefore form passive sentences with either referential subjects as in 7(b) and 8(b) or expletive subjects as in 7(c) and 8(c)

Unlike intransitive verbs, non-passive monotransitive verbs do not take expletive subjects whether the object is included or not. We see this in 7(d) and 8(d) on the one hand and in 7(e) and 8(e) on the other<sup>9</sup>.

At this point we wish to note that verbs that are inherently intransitive can assume cognate objects thereby acquiring all the characteristics of genuine transitive verbs in relation to passivization<sup>10</sup>. The intransitive 3(a) is repeated as 9(a) to show this.

(9a) Cibū nīaria

Cibū nī-ū-a-ari-a

Chief foc-sub-tns-speak-fv

The chief has spoken

(9b) Cibū nīaria mīario mīega

Cibū nī-a-a-ari-a mīario mīega

Chief foc-sub-tns-speak-fv speech good

The chief has spoken a good speech - literal

The chief has made a good speech.

<sup>8</sup> The term 'agents' is appropriate because the constituents referred to are capable of initiating the action denoted by the verb.

<sup>9</sup> Note, however, that in special contexts, the objects in such sentences can be deleted and some limiting words added to make the sentences correct e.g. (kwagura o tata wiki - There has bought only aunt /only aunt bought. The agent is obligatory in such cases).

<sup>10</sup> A cognate object is one derived from an intransitive verb by nominalization.

(9c) Mīario mīega yario (nī cibū)

Mīario mīega ĩ-a-ari-o (nī cibū)

Speech good sub-tns-speak-pas (by chief)

A good speech has been spoken (by the chief)-literal

A good speech has been made (by the chief)

(9d) Nikwario mīario mīega (nī cibū)

Nī-kũ-a-ari-o mīario mīega (nī cibū)

Foc-expl-tns-speak-pas speech good(by chief)

There has been spoken a good speech (by the chief)

There has been made a good speech (by the chief)

(9e) ?Nikwaria cibū mīario mīega.

Nī-kũ-a-ari-a cibū mīario mīega

Foc-expl-tns-speak-fv chief speech good

There has spoken the chief a good speech

From 9(a), we see that the verb 'aria' - (speak) is intransitive but in 9(b), it has acquired the object 'mī-ari-o'-(speech) which is formed from the verb itself. The verb and the object are therefore cognates (related). 9(c) and 9(d) show that a personal and an impersonal passive sentence respectively, can be formed with such verbs. 9(e) is of questionable acceptability<sup>11</sup>

<sup>11</sup>This is probably because the non-passive verb involved can be used both intransitively e.g. 9(a) and transitively with a cognate object as in 9(b). As we have already seen, underived intransitive verbs allow expletive subjects while underived transitive ones don't. 9(e) would appear to be 'caught in the middle'.

### 5.2.3 DITRANSITIVE (THREE-ARGUMENT) VERBS

There are a few verbs in Gikũyũ that take two objects (ditransitive) and they behave like their monotransitive counterparts with respect to passivization. However, with ditransitive verbs, the question arises as to which of the two objects of the active sentence should move to the subject slot when the sentence is passivized. The following examples show what happens in Gikũyũ.

(10a) Mwarimũ nĩaruta ciana mathabu

Mwarimũ nĩ-a-a-rut-a ciana mathabu

Teacher foc-sub-tns-teach-fv children maths

The Teacher has taught the children maths.

(10b) Ciana nĩciarutwo mathabu (nĩ mwarimũ)

Ciana nĩ-ci-a-rut-w-o mathabu (nĩ mwarimũ)

Children foc-sub-tns-teach-pas-fv children (by the teacher)

The children have been taught maths (by the teacher)

(10c) \*Mathabu nĩmarutwo ciana (nĩ mwarimũ)

Mathabu nĩ-ma-a-rut-w-o ciana (nĩ mwarimũ)

Maths foc-sub-tns-teach-pas-fv children (by teacher)

Maths has been taught to children (by the teacher)

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- (10d) Nikwarutwo ciana mathabu (nĩ mwarimũ)  
 Ni-kũ-a-rut-w-o ciana mathabu (nĩ mwarimũ)  
 Foc-expl-tns-teach-pas-fv children maths (by teacher)  
 There has been taught children maths (by the teacher)
- (10e) \*Nikwaruta mwarimũ ciana mathabu  
 Nĩ-kũ-a-rut-a mwarimũ ciana mathabu  
 Foc expl-tns-teach-fv teacher children maths  
 There has taught the teacher children maths
- (11a) Mũrĩmi niahitha icembe mũgũnda  
 Mũrĩmi nĩ-a-ahith-a icembe mũgũnda  
 Farmer foc-sub-tns-hide-fv hoe garden  
 The farmer has hidden the hoe in the garden.
- (11b) Icembe nĩriahithwo mũgũnda (nĩ mũrĩmi)  
 Icembe nĩ-rĩ-a-hith-w-o mũgũnda (nĩ mũrĩmi)  
 Hoe foc-sub-tns-hide-pas-fv garden (by farmer)  
 The hoe has been hidden in the garden (by the farmer)
- (11c) Mũgũnda nĩkwahithwo icembe (nĩ mũrĩmi)  
 Mũgũnda nĩ-ku-a-hith-w-o icembe (nĩ mũrĩmi)
-

Garden foc-expl-tns-hide-pas-fv hoe (by farmer)

In the garden there has been hidden a hoe (by the farmer).

(11d) Nikwahithwo icembe mūgūnda (nī mūrīmi)

Nī-kū-a-hith-w-o icembe mūgūnda (nī mūrīmi)

Foc-expl-tns-hideppas-fv hoe garden (by farmer)

There has been hidden a hoe in the garden (by the farmer)

(11e) \*Nikwahitha mūrīmi icembe mūgūnda

Nī-kū-a-hith-a mūrīmi icembe mūgūnda

Foc-expl-tns-hide-fv farmer hoe garden

There has hidden the farmer a hoe in the garden

Both 10(a) and 11(a) have ditransitive non-passive verbs. However, while 10(a) has a benefactive and a patient object in that order, 11(a) has the sequence of a patient and a locative object. To obtain the basic passives in 10(b) and 11(b), the first objects of 10(a) and 11(a) ('ciana'-children and 'icembe'-hoe respectively) have been subjectivized. The ill-formed 10(c) tells us that ditransitive verbs whose second object is non-locative have only two options in passivization. These are:

(a) With the first object of the active verb as subject e.g. 10(b).

(b) With the two objects in their usual post-verbal position and an expletive pronoun in the subject slot thus forming an impersonal passive sentence e.g. 10(d).

In the latter case, the second object, whether animate or otherwise, can not be subjectivized

because that would compromise either grammaticality or semantic acceptability<sup>12</sup>. This is seen in 10(C). The latter is violated where the two objects are animate.

On the contrary, the ditransitive verbs bearing a locative object allow three possibilities in passivization. These are:

- (a) A basic passive sentence as in 11(b) where the first object of the active verb becomes subject
- (b) A second basic passive sentence where the second object (locative) is subjectivized e.g. 11(c).
- (c) An impersonal passive where the two objects remain post-verbal and an expletive pronoun takes subject position e.g. 11(d).

Once again, as is the case with monotonatives, underived ditransitive verbs do not take expletive subjects. We see this in the ill-formed 11(e).

#### 5.2.4 ARGUMENTLESS VERBS

Although the passive morpheme is highly productive in Gikūyū, there are some verbs which can not be passivized (see chapter 2 and appendix A for statistical proof of this). We gave a few intransitive examples in section 6.3. We now look at more examples but this time from what we have called argumentless verbs. These are verbs that do not require a thematic argument. We exemplify this below.

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<sup>12</sup> See qualification in section 3.4.2.

(12a) Riūa nīriara tene

Riūa nī-rī-ar-a tene

Sun foc-sub-tns-shine-fv early

The sun has shone early.

(12b) Nikwaara riūa tene

Nī-kū-a-ar-a riūa tene

Foc-expl-tns-shine-fv sun early

There has shone the sun early

(12C) Nikwaara

Nī-kū-a-ar-a

Foc-expl-tns-shine-fv

There has shone-literal

(12d) \* Nikwarwo tene (nī riūa)

Nī-kū-a-ar-w-o tene (nī riūa)

Foc expl-tns-shine-pas-fv early (by sun)

There has been shone early (by the sun)

(13a) Mbura nīyakā

Mbura nī-ī-a-kī-a

Rain foc-sub-tns-stop raining-fv

The rain has stopped

(13b) Nīgwakīa mbura

Nī-kū-a-kī-a mbura

Foc expl-tns-stop raining-fv rain

There has stopped raining-literal

It has stopped raining

(13c) Nīgwakīa

Nī-kū-a-kī-a

Foc-expl-tns-stop raining-fv

There has stopped raining-literal

It has stopped raining.

(13d) \*Nīgwakīo (nī mbura)

Nī-kū-a-kī-o (nī mbura)

Foc-expl-tns-stop raining (by rain)

There has been stopped raining (by the rain)

On the surface, examples 12(a) and 13(a) would appear to have external arguments (because they have subjects). 12(b) and 13(b) however, counter this assumption because the subjects in 12(a) and 13(a) now appear post-verbally; a position normally occupied by internal arguments (e.g. objects and unaccusative subjects). Interestingly, 12(c) and 13(c) point us towards rejecting the above two assumptions. This is because, in these sentences, the verbs are underived and yet accept expletive subjects. This wouldn't be possible if the verbs had theta-

marked arguments.<sup>13</sup> 12(d) and 13(d) are indicative of the fact that such argumentless verbs are not passivizable. 'Argumentlessness' appears to be characteristic of weather verbs. Others include. 'tuka'-be dark and 'ura'-rain.

Having described the passive phenomena in Gikūyū, we now attempt to explain the same theoretically. Our starting point will be the Merger Theory of Marantz (1984).

### 5.3.0 THE PASSIVE CONSTRUCTION IN THE MERGER THEORY (MARANTZ, 1984)

Marantz's theory states that active and passive sentences are related by a productive morphological process involving a root verb and a passive affix. Marantz claims that both the root verb and the passive affix are lexical items found at L-S level. However, while the root verb has an argument structure and semantic role assigning features, the passive affix has neither. The affix is therefore said to be semantically empty.

The import of this is that both the active and the passive verbs have the same argument structure and assign the same semantic roles. This is because the active verb root percolates its features to the passive verb in accordance to the Percolation Principle. This Principle states that a root percolates (passes on) its features to a derived word if the deriving affix lacks in those particular features. In the passive for example, the derived verb becomes an argument-taker and a semantic role assignor by virtue of having inherited these features from the active through percolation (remember that the affix lacks in these features).

Marantz proposes that there are two levels in the derivation of a passive sentence. The first is the L-S level in which semantic roles such as logical subject and logical object are

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<sup>13</sup>We shall explain this theoretically later in this chapter.

assigned. The logical subject can then be realised as agent, experiencer etc., while the logical object can be realised as theme or patient (1984:125).

At this L-S level, the subject position is assigned its semantic role by the entire predicate (VP) while the object position gets its role from the underived verb. At this level, the passive affix is not considered an independent constituent since it doesn't assign any semantic role or take any argument. It therefore must attach to the root at this L-S level. This is not seen as merger since merger takes place between two lexical items that assign roles and take arguments.

The second level is that of S-structure. At this level, the grammatical subject position is referred to as SUB while the grammatical object position is called OBJ.

The connection between the L-S and the S-structure levels is that the constituents at L-S (such as the logical subject and logical object) are mapped onto the constituents at S level (SUB and OBJ) by Principle M which states that, 'If X governs Y at L-S structure, then the S-structure counterpart of X head-governs the S-structure of Y'. (1984: 56).

Head-Government can be defined as follows, 'X head-governs Y iff X governs Y or a phrase that X heads governs Y'. (1984:56).

This mapping principle places constraints on what can correspond to what between the L-S and S levels. For instance, the L-S logical object of the underived verb can only be mapped onto the SUB at S level. This simply means that the object of the active verb moves to the grammatical subject position in a passive sentence. The logical subject on the other hand need not correspond to any constituent at S because it can be left out in a passive sentence. However, it may appear as a 'by' phrase bearing the semantic role assigned by the predicate.

For the above mapping to happen the way it does, the affix and the root verb must have different features at L-S structure. This is by virtue of the No vacuous Affixation Principle (henceforth NVAP) according to which,

For a certain class of features  $F$ , an ( $\alpha F_i$ ) affix may attach only to a  
 ( $-\alpha F_i$ ) root. (Marantz, 1984: 128)

This means that if for example the root verb has the feature [+log sub][+transitive], the affix must carry opposite features [-log sub] [-transitive].

Being [+log sub], which is short for logical subject, indicates that a sentence has a grammatical subject that is also the logical subject. [-log sub] means that a sentence can not take a logical subject in the grammatical subject position at L-S level. When the verb is [+transitive], it has a logical object in the grammatical object position. Being [-transitive] means that the verb can not take a logical object in the grammatical object position.

Having explained what the features mean, we now look at how percolation takes place. When the passive affix attaches to the root verb at L-S level, the features of the affix take precedence over those of the root following the Percolation Principle. The derived/passive verb therefore bears the features [-log sub][-transitive]. Thus, the passive sentence can neither have a logical subject at SUB (grammatical subject position at (S-level) nor a logical object at OBJ (grammatical object position at S-level). Such a sentence is therefore rendered intransitive.

Marantz argues that because the logical object is a direct argument of the passive verb and also bears a semantic role, it must be expressed at S-level. Now that it can not remain at OBJ, the only way to express it is to move it to SUB. This position is empty (having being vacated by the logical subject) and therefore is a landing site for the moved logical object. As earlier mentioned, the logical subject need not be actually expressed at S-level since the derived verb is [-log sub]. Sometimes though, it appears in a 'by' phrase, and is considered an indirect syntactic argument of the verb. Whether expressed or not, this logical subject is said to be inherently present and borne by an indefinite someone or something.

### 5.3.1 THE GĪKŪYŪ PASSIVE WITHIN THE MERGER THEORY

We find that the above analysis caters for languages such as English that only have personal passives of transitive verbs. Those like GĪkūyū that have both personal and impersonal passive constructions of transitive verbs as well as impersonal passives formed from intransitive verbs have not been accounted for this far. The impersonal constructions emanating from transitive verbs are ruled out by the [-transitive] feature of a passive verb (meaning that an object can't appear post-verbally). Those formed from intransitive verbs are excluded by the fact that their active verbs are not [+log sub] [+transitive] as stipulated by the theory. For this reason, Marantz extends his theoretical account by proposing that the passive affix bears different features in different languages.

In those languages which only passivize transitive verbs in personal constructions, the passive affix has the features [-log sub][-transitive] as we have already seen. However, in the languages that passivize intransitive verbs, the passive affix is [-log sub] and is unspecified for the transitivity feature. Underived intransitive verbs therefore bear the features [+log sub] [-transitive] following the stipulation of NVAP. Once again, when the passive affix attaches to the intransitive verb root, the [-log sub] feature of the affix becomes a feature of the passive verb through percolation. Because the affix is not specified for transitivity, the [-transitive] feature of the root verb percolates to the passive verb thus making it [-log sub] [-transitive].

This implies that the passive sentence formed from an intransitive verb will have neither a logical subject nor a logical object. How then does a subject come about in such a sentence? Marantz says, 'independence rules of grammar demand an overt grammatical subject' 1984:138. Accordingly, a dummy is used to fill the empty SUB position. This dummy has no L-S Structure counterpart since it bears no semantic role.

This account is adequate for Gikũyũ impersonal passives of intransitive verbs because they behave as predicted. Below is an illustration.

(14a) Andũ nĩmatheka

Andũ nĩ-ma-a-thek-a

People foc-sub-tns-laugh-fv

People have laughed

(14b) Nĩgwathekwo (nĩ-andũ)

Nĩ-kũ-a-thek-w-o (nĩ andũ)

Foc-expl-tns-laugh-pas-fv (by people)

There has been laughed (by people)-literal

People have laughed

As can be seen, the passive example above has no logical subject but rather an expletive in the grammatical subject position. A logical object is also lacking in the grammatical object position. The passivized intransitive verb 'thekwo' (has been laughed) can therefore be said to be [-log sub] [-transitive] in accordance with the theory.

As mentioned earlier, Gikũyũ forms both personal and impersonal passives from transitive verbs. The personal ones behave like English passives with respect to the features of the root and the affix. In both, languages the root of a monotransitive verb is [+log sub] while the passive affix is [-log sub] [-transitive]. Examples are given below:

(15a) The boy stole my pen

(15b) My pen was stolen (by the boy)

(16a) Cūcū nīagūra mūgate

Cūcū nī-ū-a-gū-r-a mūgate

Grandmother foc-sub-tns-buy-fv bread

Grandmother has bought bread

(16b) Mūgate nīwagūrwo (nī cūcū)

Mūgate nī-ū-a-gūr-w-o (nī-cūcū)

Bread fac-sub-tns-buy-pas-fv (by grandmother)

Bread has been bought (by grandmother).

At the L-S level, the passive sentences in the (b) examples lack both a logical subject in the grammatical subject position and a logical object in the grammatical object position respectively. This is because the features of the passive verb do not allow it to take a logical subject at SUB or a logical object at OBJ. The logical object however, being a direct argument of the passive verb, must be expressed and is therefore relocated from its post-verbal position to the empty SUB position.

We now turn to impersonal passives formed from transitive verbs. To explain such constructions, Marantz says that an underived transitive verb has the [-log sub] and is unspecified for transitivity. After passivization, the passive verb acquires the features [-log sub]

[+transitive]<sup>14</sup> through feature percolation. This means that such a passive verb will take a logical object at OBJ but not a logical subject at SUB. The object therefore remains in its post-verbal position while the grammatical subject slot is filled by an expletive as illustrated below.

(16c) Nīkwagūrwo mūgate (nī cūcū)

Nī-kū-a-gūr-w-o mūgate (nī cūcū)

Foc-expl-tns-buy-pas-fv bread (by grandmother)

There has been bought bread (by grandmother)

'Mūgate' - (bread) is the logical object while -ku- is the expletive.

Although the theory appropriately explains personal and impersonal passives of transitive verbs in Gikūyū as shown above, we note that it lacks unity. This is because it seems as if in the derivation of passive sentences, we are dealing with two passive affixes in the same language – one that is [-log sub][transitive] which is used in the formation of personal passives of transitive verbs and another, that is only marked [-log sub] used in the derivation of impersonal passives of transitive verbs. We find this implausible.

Moreover, Marantz does not recognize impersonal passives of transitive verbs as passives at all but instead calls them non-passive constructions bearing the passive morpheme (1984:140). We feel that such constructions in Gikūyū are indeed passive because, apart from bearing the passive morpheme (-w-), they also have a passive meaning<sup>15</sup> (also see Comrie, 1977).

We also find that his proposal for personal passives of transitive verbs can not

<sup>14</sup> Since the passive affix is not specified for transitivity, the [+transitive] feature of the root must prevail.

<sup>15</sup> Comrie (1977) also treats them as passives.

accommodate ditransitive verbs. As we have already seen, the features of a transitive root are [+log sub] [+transitive] while those of the passive affix are [-log sub][-transitive] meaning it lacks both a logical subject and a logical object. We repeat the following examples to show that the preceding claims are not true of Gikũyũ.

(17a) Mwarimũ nĩaruta ciana mathabu

Mwarimũ nĩ-a-a-rut-a ciana mathabu

Teacher foc-sub-tns-teach-fv children maths.

The teacher has taught the children maths

(17b) Ciana nĩciarutwo mathabu (nĩ mwarimũ)

Ciana nĩ-ci-a-rut-w-o mathabu (nĩ mwarimũ)

Children foc-sub-tns-teach-pas-fv maths (by teacher)

The children have been taught maths (by the teacher).

(18a) Mũrĩmi nĩahitha icembe mũgũnda

Mũrĩmi nĩ-a-a-hith-a icembe mũgũnda

Farmer foc-sub-tns-hide-fv hoe garden

The farmer has hidden the hoe in the garden.

(18b) Icembe nĩriahithwo mũgũnda (nĩ mũrĩmi)

Icembe nĩ-rĩ-a-hith-w-o mũgũnda (nĩ mũrĩmi)

Hoe foc-sub-tns-hide-pas-fv garden (by farmer)

The hoe has been hidden in the garden (by the farmer)

In the (a) examples, there are two logical objects- the primary object which appears next to the verb and the second object. In the passive (b) examples, the second object ('mathabu'-maths) and ('mũgũnda'- garden) remain in their post-verbal position while the primary ones ('ciana' - children and 'icembe'-hoe) move to the subject slot. To use the terminology of Merger Theory, the second logical object actually corresponds to the OBJ at S-structure although Marantz says that this should automatically be ruled out by the features of the derived verb. We quote him: "The [-transitive] feature prevents the logical object from corresponding to the OBJ of the verb"(Ibid. 1984:125).

Evidence that these second objects are actual objects can be deduced from the fact that they can be subjectivized in passive sentences. Examples appear below.

- (19a) Mathabu nĩmarutanwo (nĩ mwarimũ)  
 Mathabu nĩ-ma-a-rut-an-w-o (nĩ mwarimũ)  
 Maths foc-sub-tns-teach-assoc-pas-fv (by teacher)  
 Maths has been taught (by the teacher).

- (19b) Mũgũnda nĩkwahithwo icembe (nĩ mũrĩmi)  
 Mũgũnda nĩ-kũ-a-hith-w-o icembe (nĩ mũrĩmi)  
 Garden foc-sub-tns-hide-pas-fv hoe (by farmer)  
 In the garden there has been hidden a hoe (by the farmer).

The passive verbs in (17b) and (18b) are therefore not [-transitive] as predicted by the theory.

Perhaps it could be argued, in favour of the theory, that these nominals (mathabu and

mũgũnda), are not true logical objects because they do not bear all the object features such as adjacency to the verb and cliticization. However, we wish to note that in Bantu, verbs can take a series of objects (Kioko, 1994 and 1999). In asymmetrical languages, of which Gĩkũyũ is one as we have argued in section 3.4.2 only the first post-verbal nominal carries all the primary object qualities. Our point here is that 'mathabu' and 'mugunda' are objects but not primary ones. This does not contradict the claim made in section 3.4.2 to the effect that Gĩkũyũ is not a double-object language. To begin with, we note that both 19(a) and (b) are marked. 19(a) contains an associative affix without which the sentence would be ill-formed. It is therefore twice-derived (to include first the passive affix and then the associative one). In 19(b), the locative 'mũgũnda' (garden) is not in its typical position. It has been fronted for the purpose of topicalization.

Lastly, we turn our attention to verbs which do not passivize. In Gĩkũyũ, such verbs either lack a theta-role and therefore have zero valency or have non-agent subjects. We have in mind verbs such as: 'kia' - (dawn) and 'butha' - (rot). The former (kia) is a zero-valency weather verb while the latter (butha) is a stative verb lacking an agent - the grammatical subject simply undergoes the state denoted by the verb. These verbs fall under what Marantz calls 'unaccusative' verbs. They have the features [-log sub][transitive]. As has been evident so far, the passive affix always carries at least the feature [-log sub]. Due to the 'No Vacuous Affixation Principle', these, [-log sub] verbs can not take the passive morpheme because it carries a similar feature. This then rules out the passivization of such verbs. The examples below prove that the above prediction is true for Gĩkũyũ.

(20) Riũa nĩriara

Riũa nĩ-rĩ-a-ar-a

Sun foc-sub-tns-shine-fv

The sun has shone.

(20b) \*Nikwarwo (nĩ riũa)

Nĩ-kũ-a-ar-w-o (nĩ riũa)

Foc-expl-tns-shine-pas-fv (by sun)

There has been shone by the sun

(21a) Matumbĩ nĩmabutha

Matumbĩ nĩ-ma-a-buth-a

Eggs foc-sub-tns-rot-fv

The eggs have rotted

(21b) \*Nikwabuthwo (nĩ matumbĩ)

Nĩ-kũ-a-buth-w-o (nĩ matumbĩ)

Foc-expl-tns-rot-pas-fv (by eggs)

There has been rotted by the eggs

The verbs above lack both logical subjects and objects. That is, there is no doer and no sufferer of the action or state denoted by the verbs. Other verbs that exhibit similar behaviour are: `imba'-(swell), `tuka'-(be dark) and `ura'-(rain).

To conclude this section, we have seen that Marantz's theory has been validated in some respects and challenged in others in relation to the Gikũyũ passives. For example, impersonal passives of both transitive and intransitive verbs, personal passives of transitive verbs as well as

unaccusative verbs, have to a large extent been satisfactorily accounted for. However, passives of ditransitive verbs are left unexplained. In this section, we will not propose an extension to the theory. Instead, we shall move on to the Incorporation Theory of Baker (1988a,b).

#### 5.4.0 THE PASSIVE WITHIN INCORPORATION THEORY (BAKER,1988a)

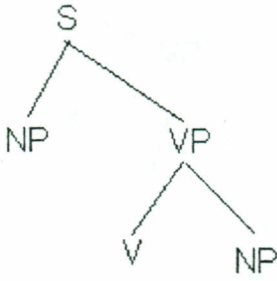
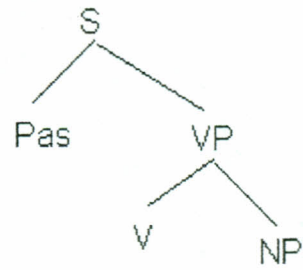
In explaining how passive sentences are made, Baker predicated his theory on the fact that the passive affix is actually a full-fledged argument of the passive verb. Like all arguments, this affix requires a theta role in order to fulfil the Theta Criterion and the Projection Principle, both of which are safeguards of well-formedness in constructions.

Baker's claim is justified by the fact that in later generative theories such as Chomsky (1981) and Arfali (1989b) an active and a passive verb have the same argument structure in accordance with the Uniformity of Theta Assignment Hypothesis (UTAH). For example, if a verb takes an internal and external argument at the D-structure, these arguments will be reflected at all levels of derivation. The following examples illustrate this:

(22a) The boy hid the ball - active

(22b) The ball was hidden - passive

The active verb in 22(a) 'hid', takes the external argument 'the boy' which is assigned the external theta role by the VP. It has an internal argument 'the ball' which it directly assigns the internal theta role. The passive verb in 22(b) also has two arguments. The first is the internal one 'the ball' which bears the internal theta role assigned by the verb. The second is the passive affix '-en' which is an external argument bearing the external theta role. We represent this in the following D-structure diagrams.

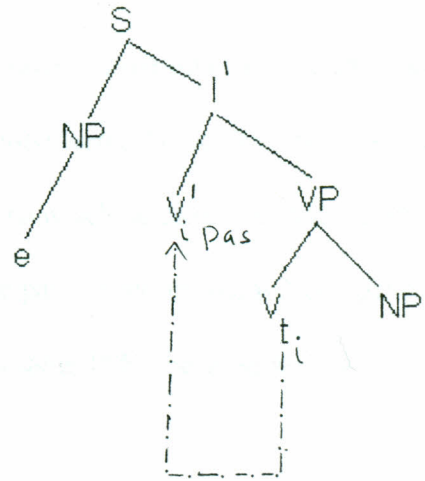
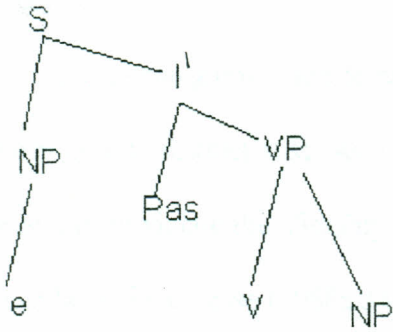
ActivePassive

(Baker, 1988a: 308)

So despite different surface structures, active and passive verbs have the same argument structures and theta role assignment patterns.

We wish to make it clear at this point that in Incorporation and related theories such as GB., the passive verb is not derived from its active counterpart. Rather, the passive verb is generated in the D-Structure with its own argument-structure.

The next question Baker addresses is how the root verb and the passive affix merge to form a passive verb. He proposes that the root verb moves from its base position to incorporate onto the affix. This movement appears to violate government because the verb moves without governing its trace. To solve this problem, Baker proposes that in the D-structure the passive affix should appear not on the verb, but under I (INFL). Hence:



(Baker, 1988a: 309)

In the I position, the passive affix is given the external theta role by the VP (because the affix is outside the maximal projection of the verb). It should be noted that if the affix did not receive this theta role, the Theta Criterion, which states that all arguments of the verb must be assigned a role, would be violated. The verb can now incorporate to the left of the passive affix. We think this is a tenable claim because in mainstream generative theories, participle markers are said to attach to the verb. Baker appeals to incorporation as a way of bringing this about. Another motivation for incorporation to take place is that the passive affix must have a lexical root to attach to at S-structure.

In Baker's theory, the passive affix renders the 'by' phrase redundant by virtue of bearing the same features normally associated with this 'by' phrase. This comes about because the 'by' phrase in a passive sentence corresponds to the subject of the active verb. Such a subject is the external argument and external theta role assignee of the active phrase verb. These two features, as we have seen, are 'usurped' by the passive affix in a passive construction. According to Baker, in cases where the 'by' phrase appears, a kind of doubling is said to have

occurred<sup>1</sup>.

In explaining how the internal argument (object) moves to the subject position, Baker uses the notion of abstract case. As an argument of the passive verb, the passive affix needs case in order not to violate the Visibility Condition according to which all theta role-bearing arguments must be assigned case (1988a:340 and 352). Since the passive morpheme is base-generated in INFL, it cannot receive the nominative case from this same INFL because as Baker says, 'No category may assign case to itself' (1988a:341).

To solve this problem, the theory proposes that the verb must move to the left of the passive affix from where it incorporates into this same affix. From that position, the moved verb assigns the accusative case to the passive affix. The consequence of this is that the passive verb no longer has any case to assign to its internal argument. Because this argument needs case, it has to move to a position where case can be assigned. We recall that the nominative case is still unassigned and is therefore free for assignment. The internal argument moves to the subject position where it receives the nominative case assigned by INFL.

Baker also applies the Predication Theory (also known as the Extended Projection Principle in Chomsky (1981)) to explain why the internal argument must be moved to subject position. This theory states that all clauses have the NP<sub>S</sub> position (subject position) filled at S-structure (1988a: 356). This means that every clause must have a subject. One option of fulfilling this requirement is by preposing an internal argument while the other is inserting an expletive element in the empty subject position in a passive sentence. The option taken depends on whether one wants to form a personal or impersonal passive as we shall see later.

Coming back to case assignment, Baker predicts that, generally, there are three types of languages. In all the three types, the passive morpheme is generated in the INFL. The

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<sup>1</sup> That this doubling doesn't lead to ill-formedness would appear to be counterintuitive.

difference is that in some languages such as English and Chichewa, this morpheme needs case while in others like Dutch, it only takes case if case is available as is the case with transitive verbs. In the third type, the passive affix does not need case at all.

#### 5.4.1 INCORPORATION AND THE GÌKŪYŪ PASSIVE

We shall now examine each language type according to case assignment in order to place the Gìkūyū passive. If we were to use the notion of abstract case in Gìkūyū, only personal passive constructions of transitive verbs would be explained by the first type in which the passive affix needs case. This is because in such sentences, the affix takes up the accusative case thus rendering the object caseless. As already shown, this object moves to subject position to receive the nominative case from INFL. An example is presented below:

(23a) Mami nĩahaata nyũmba

Mami nĩ-a-a-haat-a nyũmba

Mother foc-sub-tns-sweep-fv house

Mother has swept the house

(23b) Nyũmba nĩyahaatwo (nĩ mami)

Nyũmba nĩ-ĩ-a-haat-w-o (nĩ mami)

House foc-sub-tns-sweep-pas-fv (by mother)

The house has been swept by mother.

In 23(a), the object ('nyũmba' - house) appears post-verbally but in the passive 23(b), it has moved to subject position in order to get the nominative case. 23(b) is an example of a personal passive formed from a monotransitive verb.

In the above analysis, Baker does not accommodate impersonal passive formed from transitive verbs in which the object remains in its base post-verbal position while the subject slot is filled by an expletive as in the example below:

- (23c) Nikwahaatwo nyũmba (nĩ mami)  
 Nĩ-kũ-a-haat-w-o nyũmba (nĩ mami)  
 Foc-expl-tns-sweep-pas-fv house (by mother)  
 There has been swept the house (by mother)

We therefore conclude that Gikũyũ doesn't belong to this first type of language.

In the second type of languages, the passive affix only takes case if case is available. What this means is that if the verb is transitive, it will assign the accusative case to the affix. This will force the object to relocate in search of another case. If it is intransitive, it will have no accusative case to assign to the passive affix. In the latter case, the affix will be made visible (see section 5.4.0 for the Visibility Condition) by incorporation, which, like case, is considered a PF (phonological form) identifier.

Once again, we observe that if the passive affix takes the accusative case, the resultant construction will be a personal passive of a transitive verb such as the one in 23(b) above. If the affix doesn't take case, impersonal passive of intransitive verbs are formed e.g.

(24a) Mwangi nĩatheka

Mwangi nĩ-a-a-thek-a

Mwangi foc-sub-tns-laugh-fv

Mwangi has laughed

(24b) Nĩgwathekwo (nĩ Mwangi)

Nĩ-kũ-a-thek-w-o (nĩ Mwangi)

Foc-expl-tns-laugh-pas-fv (by Mwangi)

There has been laughed (by Mwangi)

In passive sentences the 'by phrases' are optional because they are external arguments just as the obligatory passive affix is. What accounts for the expletive '-gũ-' that now occupies the subject position in 24(b) is the Predication Theory and not case. If we were to place Gikũyũ in this category of languages, impersonal passives of transitive verbs would remain unaccounted for.

In the third type of languages, the passive affix is said not to require case. Placing Gikũyũ among such languages would explain impersonal passives of both intransitive and transitive verbs. In the formation of impersonal passive from intransitive verbs, these languages behave like those of type two (where the affix takes the accusative case if it is available). As earlier mentioned, this explains examples such as 24(b) above.

Regarding the transitive verbs, the claim is that since the passive affix does not require case, the verb is free to assign the accusative case to its object. This object, therefore, doesn't need to move in order to receive case elsewhere. Once again, the Predication Theory demands that the subject position be filled. Since the object is not available to do so, an expletive is

inserted yielding an example such as 23(c).

Close as this comes to accommodating the passive in Gikũyũ, it falls short of this goal because personal passives of transitive verbs as in 23(b) above (where the object relocates to subject position) are not catered for. In other words, if the passive affix hasn't received the accusative case, meaning that this case is available to the object, what triggers the movement of the object to subject position?

Ditransitive verbs in Gikũyũ can not be explained by Baker's proposed case-based analysis. In an active sentence, the theory proposes that the theme argument should receive the accusative case by the verb while the goal/beneficiary argument should take an inherent dative case typically associated with goals. According to Baker (1988a:354), this happens in languages in which the theme precedes the goal (since structural case is assigned under government, adjacency to the case-assigning verb is crucial). Using example (25) below, we look at the implications of this stipulation for Gikũyũ.

(25a) Mwarimũ nĩaruta ciana mathabu

Mwarimũ nĩ-a-a-rut-a ciana mathabu

Teacher foc-sub-tns teach-fv children maths

The teacher has taught the children maths

By virtue of adjacency to the case assignor and primacy in objecthood, the goal argument (ciana-children) is assigned the accusative case contrary to the predictions of the theory whereby this case is expected to go to the theme (mathabu-maths). The theme can not receive the accusative case because it lacks immediate proximity to the verb. This creates an awkward situation in which the Case Filter is grossly violated in two ways. Firstly, the goal now

has two cases; the accusative one which is structurally assigned and the dative one assigned inherently. Secondly, the theme is without case since the accusative case it is expected to take can not be assigned twice as Culicover (1997) suggests. This is because Gikũyũ is not a double object language like Kinyarwanda. We would therefore expect 25(a) to be ill-formed yet it is not.

Our claim that in Gikũyũ the structural accusative case goes to the goal (rather than the theme as predicted by the theory) can be validated by 25(b) and (c) below:

(25b) Ciana nĩciarutwo mathabu (nĩ mwarimũ)

Ciana nĩ-ci-a-rut-w-o mathabu (nĩ mwarimũ)

Children foc-sub-tns-teach-pas-fv maths (by teacher)

The children have been taught maths (by the teacher)

(25c) \* Mathabu nĩmarutwo ciana (nĩ mwarimũ)

Mathabu nĩ-ma-a-rut-w-o ciana (nĩ mwarimũ)

Maths foc-sub-tns-teach-pas-fv children (by teacher)

Maths has been taught children (by the teacher)

In the passive 25(b) above, the goal has moved to the subject position presumably because its accusative case has been taken by the passive affix. Thus, the goal is left caseless and must move to a position where another case (nominative) is assigned. It should be noted that 25(c), in which the theme has moved to subject position, is ill-formed. From a Case point of view, this movement is totally unmotivated given that the case requirements of the passive affix have already been met. It therefore can not be argued that the theme moves after its case is

absorbed by the affix (that is assuming that the theme has a case in the first place - recall that we have already argued that the theme is caseless in a Gikũyũ underived sentence). The movement is therefore illegitimate and results in ill-formedness.

We are aware that some scholars like Stowell (1981) have suggested that a special inherent case be assigned to themes that are caseless. We find it difficult to adopt this suggestion for two reasons:

- (1) Since Gikũyũ is not a morphologically case-marked language, it is not possible to back up this claim with data. The said case will therefore not be evident on the argument in question.
- (2) It is implausible to argue that the theme at times gets the structural accusative case (when it is the object of a monotransitive verb) and at other times receives the special inherent one (where the verb is ditransitive).

We therefore conclude that Baker's proposal is designed for languages in which the theme precedes the goal and for those that have morphological case-markings (Ibid:354-355). Since Gikũyũ does not fall under either category, the claims of the theory in regard to ditransitive verbs can not be used to explain passive constructions formed from such verbs.

So far, we have seen that Baker's case-based typology yields three types of languages: those whose passive affix needs case, those in which the affix only takes case if it is available and those whose affix doesn't need case. Unfortunately for the theory, Gikũyũ does not fit properly in any of these types because one or other type of passive is left uncatered for. We therefore find a case-based account inappropriate for Gikũyũ passives. Later in section 5.4.2, we shall try to explain the same phenomenon using the Predication Theory which Baker mentions but doesn't explore at any length. In the mean time, we turn to another claim of Incorporation Theory that

does not find support in Gikūyū data. This relates to theta-role assignment in intransitive verbs and its implication for passivization. Baker says that there are two types of intransitive verbs; those that passivize (hence impersonal passives) and those that don't. Those that do are called unergative and are characterised by agentive arguments bearing the external theta role in their active forms (1988a:322). An internal argument is a constituent whose theta role is assigned within the VP. Basically, such a constituent occupies the object position. On the other hand, an external argument is a constituent whose theta role is assigned VP externally. Typically, such an argument is found in subject position.

Our problem with this is that in Gikūyū, all underived intransitive verbs assign an internal and not an external theta role as is evidenced by the following examples.

(26a) Kaana nĩgooka

Kaana nĩ-ka-a-ũk-a

Child foc-sub-tns-come-fv

The child has come

(26b) Nĩguoka kaana

Nĩ-kũ-a-ũk-a kaana

Foc-expl-tns-come-fv child

There has come a child

(26c) Nĩguokwo (ni kaana)

Nĩ-kũ-a-ũk-w-o (nĩ-kaana)

Foc-expl-tns-come-pas-fv (by child)

There has been come (by the child)

(27a) Kaana nīkaḥooya

Kaana nī-ka-a-hoy-a

Child foc-sub-tns pray-fv

The child has prayed

(27b) Nikwahooya kaana

Nī-kū-a-hoy-a kaana

Foc-expl-tns-pray-fv-child

There has prayed a child

(27c) Nikwahooywo (nī kaana)

Nī-kū-a-hoy-w-o (nī kaana)

Foc-expl-tns-pray-pas-fv (by child)

There has been prayed (by the child)

The fact that the nominals in the (a) examples appear post-verbally in the underived (b) examples is proof that these arguments are indeed internal arguments bearing internal theta roles (Afarli, 1989). This means that their D-structure position is the same as that of objects of transitive verbs. Their movement to the subject position is motivated by the requirement that all clauses must have subjects (Predication theory).

Following Baker's thrust, the verbs in the sentences above should not passivize because they lack an external theta role to be taken up by the passive affix. In other words, since the passive

affix is said to bear the external theta role in a passive sentence, it can not attach to verbs that have no external theta role to assign. Baker says, 'it must receive an EXTERNAL theta-role because it is generated under the INFL node.....'(1988a-313).

That this is not the case in regard to the Gikũyũ intransitive verbs is exemplified by the passive sentences in 26(c) and 27(c). Here, the passive affix can only take the internal theta role because it is the only one available. These examples apparently lead us to the conclusion that in Gikũyũ, passivization is possible with any verb that has at least one theta role to assign, be it external or internal (see Kioko, 1994 for Kikamba).

Such an assumption would be quite in order but for the following counter examples.

(28a) Mahũa nĩmooma

Mahũa nĩ-ma-a-ũm-a

Flowers foc-sub-tns-dry-fv

Flower have dried up

(28b) Nikuoma mahũa

Nĩ-kũ-a-ũm-a mahũa

Foc-expl-tns-fv flowers

There has dried up flowers

(28c) \* Nikuomwo (nĩ mahũa)

Nĩ-kũ-a-ũm-w-o (nĩ mahũa)

Foc expl-tns-dry-pas-fv (by flowers)

There has been dried up (by flowers)

(29a) Matumbī n̄mabutha

Matumbī n̄-ma-a-buth-a

Eggs foc-sub-tns-rot-fv

Eggs have rotted

(29b) Nikwabutha matumbī

N̄-kū-a-buth-a matumbī

Foc-expl-tns-rot-fv eggs

There has rotted eggs

(29c) \*Nikwabuthwo (n̄ matumbī)

N̄-kū-a-buth-w-o (n̄ matumbī)

Foc-expl-tns-rot-pas-fv (by eggs)

There has been rotted by eggs.

The verbs in (28) and (29) also assign an internal theta role as seen in the (b) examples. We would therefore expect them to passivize just as their counterparts in (26) and (27). However, this is not the case judging from the ill-formed 28(c) and 29(c). To explain the difference in the behaviour of the verbs in 26 and 27 on the one hand and those in 28 and 29 on the other, we must therefore look beyond the kind of theta role required by the passive affix.

Perhaps what determines whether an intransitive verb in Gikũyũ passivizes or not is the presence or absence of a logical subject. A logical subject is one that is agentive. An agentive argument is one that is able to carry out the event or participate by volition in the state denoted

by the verb. This feature is present in the subjects of the passivizable (26) and (27) and lacking in the subjects of the unpassivizable (28) and (29) whose verbs Baker calls unaccusative. This fact is not lost on Baker who states, '...the single NP of an unergative verb tends to be agentive.' (1988a:322).

The point we are making here is that passivization in Gikūyū is only possible if the verb, transitive or intransitive, has an agentive argument. Whether this argument is internal or external is not an issue as we have seen in the examples above. With unergative intransitive verbs, the passive affix takes up the internal theta role while with the transitive verbs it is associated with the external theta role. This line of thought is underpinned by the fact that in passives of intransitive verbs, the internal argument appears in an optional 'by' phrase. Similarly, in both personal and impersonal passives of transitive verbs, the external argument is omissible or may appear obliquely. This is only possible because the passive affix bears the same argument and theta role as the 'by' phrase -otherwise the Uniformity of Theta Assignment Hypothesis (UTAH) would be violated.

Our claim that an agentive argument is a prerequisite for passivization to take place is further borne out by the behaviour of argumentless (zero valency) verbs. Since such verbs lack an argument, they obviously do not have agents. We repeat the following examples to show this:

(30a) Nikwaira

Nī-kū-a-ir-a

Foc-sub-tns-become dark-fv

It has become dark

(30b) \*Nikwairwo

Nĩ-kũ-a-ir-w-o

Foc-expl-tns-become dark-pas-fv

There has been become dark

The weather verb 'ira' (become dark) has neither an external nor an internal argument. Passivization is therefore not possible as is evident in 30(b).

To sum up, we have seen that Baker considers the passive affix an argument of the verb that is assigned the external theta role. However, we have shown that in Gikũyũ this affix can receive the internal theta-role if no external one is available (e.g. intransitive verbs). Crucially, though, the argument taken up by the passive affix must be agentive.

In his Incorporation Theory, Baker makes use of two sub-theories in order to explain why movement to the subject position may need to take place. One is the Case Theory and the other is the Predication Theory (1988a: 356). As is evident in the above exposition, the thrust of his argument is based on Case Theory, which, as we have seen, doesn't explain all the passive constructions possible in Gikũyũ. However, the Predication Theory, coupled with the Theta Theory, can generally capture these types (The Theta Theory is one of the building blocks of the Incorporation Theory). Below, we look at how the Theta and the Predication theories used by Baker (1988a) can be extended to cover the Gikuyu passive.

#### 5.4.2 AN EXTENSION OF THE INCORPORATION THEORY

In the Theta Theory it is assumed that the passive morpheme absorbs the external or the agentive theta role. This renders the subject position thetaless and therefore empty at the D-structure. Consequently, this position is now a possible landing site for translocated arguments.

This directly leads us to the Predication Theory.

As mentioned in section 5.4.0, the Predication Theory simply states that a clause must have a subject. Since the subject position is empty at the D-structure of a passive clause, a way must be found to fill it. Baker suggests that there are two ways of doing this.

The first is to fill it with a non-thematic expletive thus yielding impersonal passives. If, on the other hand, a thematic nominal were to be inserted in this position, there would be two arguments; the passive affix and the thematic nominal competing for one theta role. This would violate the Theta Criterion.

The second option is to have the position filled by a moved nominal, usually an object, that receives its theta role verb internally.

Having said that, we now look at how the Predication Theory could be used to explain the various passive constructions emanating from the different verb types in Gikũyũ.

We saw in section 5.4.1 that in the D-structure, intransitive verbs have their only argument appearing in an internal position (the one normally occupied by an object). This means that the subject position is empty e.g.

(31a) \_\_\_\_\_ũka kaana  
           \_\_\_\_\_ come child

If added to the intransitive verb above, the passive affix will be assigned the internal theta role since it is the only role available. Consequently, the nominal internal argument, 'kaana'-(child), can only appear obliquely if at all. (It is already represented by the affix). The following example provides evidence of this:

(31b) \_\_\_\_\_ũkwo (nĩ kaana)

\_\_\_\_\_ ūk-w-o (nĩ kaana)

\_\_\_\_\_ come pas-fv (by child)

It is at this point that the Predication Theory comes into operation. In 31(b) above, there is no internal argument nominal to be preposed to subject position. The only recourse is to fill the position with an expletive element hence the impersonal passive below:

(31c) Nĩguokwo (nĩ kaana)

Nĩ-kũ-a-ũk-w-o (nĩ kaana)

Foc-expl-tns-come-pas-fv (by child)

There has been come (by the child)

With regard to monotransitive verbs, the affixation of the passive morpheme makes the D-structure subject position empty following Baker's claim that this affix is the external argument of the verb (same as the subject of the underived verb). That the position is empty can practically be demonstrated by the fact that the passive affix can not co-occur with the external argument in subject position. Consider 32(b) below:

(32a) Kaana nigatee ibuku

Kaana nĩ-ka-a-tee-∅ ibuku

Child foc-sub-tns-lose-fv book

The child has lost the book

(32b) \* Kaana nĩgateo ibuku

Kaana nĩ-ka-a-te-o

Child foc-sub-tns-lose-pas book

The child has been lost book

Given the Predication Theory, the empty position must be filled and there are two possibilities of doing so depending on whether one wants to form a personal or an impersonal passive sentence. For personal passives, the internal argument is moved to occupy subject position while the original subject of the underived verb optionally appears in a 'by' phrase. Compare the basic 32(a) above with the passive 32(c) below.

(32c) Ibuku nĩriateo (nĩ kaana)

Ibuku nĩ-rĩ-a-te-o (nĩ kaana)

Book foc-sub-tns-lose-pas (by child)

The book has been lost (by the child)

The other option is to let the internal argument remain in its base position and instead deploy an expletive item in the subject position. This results in an impersonal passive as shown below:

(32d) Nĩgwateo ibuku (nĩ kaana)

Nĩ-kũ-a-te-o ibuku (nĩ kaana)

Foc-expl-tns-lose-pas book (by child)

There has been lost a book (by the child)

With ditransitive verbs, the passivization alternatives are wider. Just as in monotransitive verbs, the D-S subject slot is vacant because the external argument is assumed by the passive affix. Before discussing ways in which this subject slot may be occupied, we need to recognize that there are two types of ditransitive verbs in Gikũyũ. There are those that take two non-locative objects as in the example below repeated from section 5.2.3.

- (33a) Mwarimũ nĩaruta ciana mathabu  
 Mwarimũ nĩ-a-a-rut-a ciana mathabu  
 Teacher foc-sub-tns-teach-fv children maths  
 The teacher has taught the children maths.

The first object ('ciana'-children) is a goal while the second one ('mathabu'-maths) is the theme.

There are also those that take one non-locative and one locative object as shown by the example repeated below:

- (34a) Mũrĩmi nĩahitha icembe mũgũnda  
 Mũrĩmi nĩ-a-a-hith-a icembe mũgũnda  
 Farmer foc-sub-tns-hide-fv hoe garden  
 The farmer has hidden the hoe in the garden.

Here, the first object ('icembe'-hoe) is a theme and thus a non-locative while the second ('mũgũnda-garden) is a locative argument.

For the first type of ditransitive verbs, only two 'direct' possibilities exist. One is to

translocate the primary object (first internal argument which in our example is a goal) to subject position as is seen in the personal passive below:

- (33b) Ciana ñiciarutwo mathabu (ñĩ mwarimũ)  
 Ciana ñĩ-ci-a-rut-w-o mathabu (ñĩ mwarimũ)  
 Children foc-sub-tns-teach-pas-fv maths (by teacher)  
 The children have been taught maths (by the teacher)

In this sentence, the subject is the former primary object (goal) of the underived sentence in 33(a). As we have already stated in this chapter, preposing the second object (theme) is not allowed. This is indicated in the following semantically unacceptable sentence.

- (33c) \* Mathabu ñĩmarutwo ciana (ñĩ mwarimũ)  
 Mathabu ñĩ-ma-a-rut-w-o ciana (ñĩ mwarimũ)  
 Maths foc-sub-tns-teach-pas-fv children(by teacher)  
 Maths has been taught children (by the teacher)

The obvious question here is why the theme can not occupy the subject position. That can be explained by assuming that there is a stipulation requiring that only the argument bearing the highest theta role present can relocate to the landing site. The goal is higher than the theme and that explains why 33(b) is well-formed while 33(c) is not.

The other passivization alternative available is to let the two non-locative objects remain in their base positions while an expletive takes up the subject slot e.g.

(33d) Nikwarutwo ciana mathabu (nĩ mwarimũ)

Nĩ-kũ-a-rut-w-o ciana mathabu (nĩ mwarimũ)

Foc-expl-tns-teach-pas-fv children maths (by teacher)

There has been taught children maths (by the teacher)

Interestingly, a third option, though indirect, can be available. This is achieved by further deriving the ill-formed 33(c) to include an associative morpheme. Consider the following two examples.

(33e) Mathabu nĩmarutanwo (nĩ mwarimũ)

Mathabu nĩ-ma-a-rut-an-w-o (nĩ mwarimũ)

Maths foc-sub-tns-teach-assoc-pas-fv (by teach)

Maths has been taught (by the teacher).

(33f) \* Mathabu nĩmarutanwo ciana (nĩ mwarimũ)

Mathabu nĩ-ma-a-rut-an-w-o ciana (nĩ mwarimũ)

Maths foc-sub-tns-teach-assoc-pas-fv children (by teacher)

Maths has been taught children (by the teacher)

In 33(e), the associative **-an-** affix has been inserted with the consequence that the goal argument can no longer surface (the two are mutually exclusive as shown by the ill-formed 33(f) where they co-occur). It would appear therefore that this affix is a residual marker for the goal argument (functioning like a pronominal although it lacks all the other features associated with

pronouns e.g. the pre-verbal position and the marking of concord). It must be borne in mind that since the base verb involved is ditransitive, either the goal or this associative affix must be present.

The well-formedness of 33(e) suggests that only non-affixal arguments can be preposed. Thus, although the associative affix bears the higher goal theta role, it is not allowed to fill the subject position. If this position is to be filled with a thematic argument, the only alternative available is to relocate the argument bearing the next highest theta role. In our case, this is the theme (‘mathabu’-maths).

For those verbs with a locative and a non-locative object, there are three direct options for passivization. One, the non-locative object (theme in our case) could become subject as the following example exemplifies.

(34b) *Icembe nĩrĩahithwo mũgũnda - nĩ (mũrĩmi)*

*Icembe nĩ-rĩ-a-hith-w-o mũgũnda (nĩ mũrĩmi)*

*Hoe foc-sub-tns-hide-pas-fv garden (by farmer)*

*The hoe has been hidden in the garden (by the farmer)*

Above, the subject was formerly the primary object (non-locative or theme) of 34(a).

Alternatively, the locative argument could be fronted to become subject e.g.

(34c) *Mũgũnda nĩkwahithwo icembe (nĩ mũrĩmi)*

*Mũgũnda nĩ-kũ-a-hith-w-o icembe (nĩ mũrĩmi)*

*Garden foc-expl-tns-hide-pas-fv hoe (by farmer)*

*In the garden there has been hidden a hoe (by the farmer)*

The fact that both 34(b) and 34(c) are well-formed would appear to suggest that, with verbs that take a non-locative and a locative object, the ranking of theta roles is irrelevant.

Thirdly, the two objects could remain post-verbal while an expletive element becomes subject as in 34(d).

(34d) Nikwahithwo icembe mūgūnda (nĩ mūrĩmi)

Nĩ-kũ-a-hith-w-o icembe mūgūnda (nĩ mūrĩmi)

Foc-expl-tns-hide-pas-fv hoe garden (by farmer)

There has been hidden a hoe in the garden (by the farmer)

Note that in the above example and also in 34(a), the non-locative object must precede the locative one otherwise semantic ill-formedness results e.g.

(34e) \*Nikwahithwo mūgūnda icembe (nĩ mūrĩmi)

Nĩ-kũ-a-hith-w-o mūgūnda icember (nĩ mūrĩmi)

Foc-expl-tns-hide-pas-fv garden hoe (by the farmer)

There has been hidden a garden hoe (by the farmer)

To sum up, we have attempted to show that the full range of passive constructions in Gikũyũ can be explained by the simple fact that a clause must have a subject as postulated by the Predication Theory. We have worked on Baker's premise that the passive affix is an argument of the verb and that the D-S subject position of a passive sentence is empty and therefore needs filling in accordance with the Predication Theory. We have shown that there are as many

possibilities of filling the subject position as there are passive constructions in Gikūyū, some personal and others impersonal.

This is an improvement upon Baker's case-oriented explanation which, as we have shown in section 5.4.1, only caters for some passive constructions in Gikūyū and not others.

## CHAPTER 6

### THE STATIVE CONSTRUCTION

#### 6.0 INTRODUCTION

This chapter deals with the stative morpheme. We first provide an overview of this morpheme before embarking on a description of its characteristics. Owing to the fact that literature on the stative construction is rather scarce, we try to give as much detail in our description as possible.

Elsewhere in this work, we have used the Merger and the Incorporation theories as explanatory tools for the Gikũyũ phenomena under investigation. Unfortunately, these theories are silent on the stative morpheme. However we shall use the general claims of the two theories particularly in their analysis of the passive morpheme to explain the stative construction. This is because, as we shall show, the stative and the passive morphemes are similar in many respects, key among them being their ability to reduce the valency of their host verbs and to topicalize an object.

#### 6.1 AN OVERVIEW OF THE STATIVE MORPHEME

From the outset, it is important to note that what we refer to in this work as the stative morpheme has been called different names in studies on other Bantu languages. For example, Baumbach (1987) and Matsinhe (1994) call it the 'neutro-stative', Cuenod (1967) the 'neuter

extension' and Crystal (1991), Spencer (1991) and Fagan (1992) the 'middle voice'. Works that refer to it plainly as the stative include: Gathenji (1981); Mchombo (1993); Kioko (1994) and Dubinsky and Simango (1996). Like these latter scholars, we shall simply call it the stative because there is nothing middle or neutral about it in Gĩkũyũ as we shall see.

Generally, the stative morpheme in Bantu has been identified as *-ek/ik-* by scholars such as Gathenji (1981); Givon (1990); Kioko (1994); Matsinhe (1994); Dubinsky and Simango (1996) and Simango (1998). Whether it appears as *-ek-* or *-ik-* is phonologically determined as we shall show shortly in 6.2.

The stative morpheme is associated with the meaning of, 'be able to be Xed' where X stands for the verb (Fagan, 1992: 194). According to Matsinhe (Ibid.), it expresses a state in which an entity may be found as well as a spontaneously occurring event. In 6.2, we shall return to this meaning in relation to the Gĩkũyũ stative.

It has been argued that the stative resembles the passive because both are agent-deleting. However, while this agent is recoverable and may optionally appear in a passive construction, the deleted agent in the stative is not expressible at all. Actually, Barlow (1931) claims that *-ik-* has a passive meaning but does not take an agent.

Another similarity noted between the stative and passive morphemes is that both typically make the logical object of the underived sentence the syntactic subject (see chapter 6 for the description of the passive). This affinity between the two morphemes is said to be a possible explanation for their mutual exclusiveness (Matsinhe, 1994). We shall examine the above claims relative to Gĩkũyũ in the coming section.

## 6.2 THE STATIVE MORPHEME IN GIKUYU.

The stative morpheme in Gikūyū, as in many Bantu languages, is realized as either –ek- or –īk- depending on its phonological environment. If the vowel in the last syllable of the root or stem is ‘e’ or ‘o’ the variant used is –ek-. Elsewhere, –ik- is used. The examples below show this:

- 1(a) Geth-a (harvest) → geth-ek-a  
 (b) Ror-a (watch,see) → ror-ek-a  
 (c) Haat-a (sweep) → haat-īk-a  
 (d) In-a (sing) → in-īk-a  
 (e) Rīm-a (till) → rīm-īk-a  
 (f) Rug-a (cook) → rug-īk-a  
 (g) Rug-a (jump) → rug-īk-a

As can be seen above, –īk- is more prevalent than –ek-. We saw in section 2.2.1 that the stative morpheme is very productive meaning that it can be hosted by most verbs.

However, there are a few exceptions as we shall show in 6.3.

Our examination of Gikūyū data has revealed that there is another stative morpheme whose form is simply –k-. It is syntactically peculiar in that it can only be hosted by verbs that are either inherently or derivationally reversative. The reversative morpheme in Gikūyū is –or/ur- with –or- occurring where roots have ‘o’ and –ur- occurring elsewhere. e.g.

2(a) Oh-a (tie) -> oh-or-a (untie)

(b) Un-a (hem) -> un-ũr-a (unhem)

(c) Bang-a (arrange) -> bang-ũr-a (disarrange) etc.

When stativized, these reversative verbs have two options: one with -k- and the other with —ek/ĩk- e.g.

3 (a) Bang-ũ-k-a (become disarranged)

Bang-ũr-ĩk-a (capable of being disarranged/ can be disarranged)

(b) Oh-o-k-a (become untied/loose)

Oh-or-ek-a (capable of being untied/ can be untied or loosened)

Doubtlessly, an intriguing phenomenon is discernable here. It appears as if the reversative morpheme is -o/ũ- in instances where -k- is affixed and -or/ũr- where -ek/ĩk- is attached. There are two ways in which this can be explained. One, it could be argued that the basic reversative morpheme is -o/ũ- and that /r/ is added after the affixation of the stative -ek/ĩk-. This argument is however difficult to sustain because there is no motivation to choose /r/ over all the other consonants. The second and the more appealing option is to regard -or/ur- as the basic reversative morpheme. In instances where this morpheme is immediately followed by the stative -k-, the /r/ is deleted to accommodate the syllabic structure of Gikũyũ

words. Otherwise we would have forms such as, \*bang-ūr-k-a and \* oh-or-k-a etc. The co-occurrence of /r/ and /k/ following each other in the same syllable makes the above two words phonotactically unacceptable. Notice that the full reversative morpheme is recovered when -ek/īk- is used since the presence of a vowel in the affix guards against the violation of syllabic structure constraints.

There are also two possible ways of looking at -k- and -ek/īk-. It could be said that -k- is a variant of -ek/īk- that attaches to verb stems that end in vowels while -ek/īk- affixes to verb stems ending in consonants. This is superficially borne out by the data in 3 (a) and (b) above. However, closer scrutiny reveals that the occurrence of these two forms can not be predicted on the basis of the phonological structure of the verb stems. Consider the words below:

- 4(a) He-e (give) - \* he-k-a - he-ek-a (giveable to)  
 (b) Te-e (throw away) - \* te-k-a - te-ek-a (throwable/can be thrown away)  
 (c) Thi-ī (go) - \* thi-k-a - thi-īk-a (possible to go)  
 (d) Igu-a (hear) - \* igu-k-a - igu-īk-a (be heard)  
 (e) Nyu-a (drink) - \* nyu-k-a - nyu-īk-a (be drinkable)  
 (f) Tu-a (pick) - \* tu-k-a - tu-īk-a (be pickable)  
 (g) Rī-a (eat) - \* ri-k-a - rī-īk-a (be edible/eatable)  
 (h) On-i-a (show, cause to see) - \* on-i-k-a - on-ek-a (be seen/found)  
 (i) Rum-i-a (cause/allow to bite) - \* rum-i-k-a - rum-īk-a (be bitable)

Above, we see that it is *-ek/ik-* and not *-k-* that attaches to the verb roots, all of which end in a vowel. We have included the last two causative verbs to show that even derived verbs (as is the case with reversative verbs) behave like their underived counterparts in respect to stativization.

From the foregoing, we see that the distribution of *-k-* and *ek/ik-* can not be pegged on phonological conditioning. This brings us back to our earlier assertion that *-k-* is morphologically restricted since it can only co-occur with reversative verbs. Below we provide a list of such verbs:

- 5(a) Hing-a (close) - hing-ūr-a (open) - hing-ū-ka (be open)
- (b) Tum-a (sew/seal) - tum-ūr-a (undo) - tum-ū-k-a (become undone)
- (c) Irig-a (fence) - irig-ūr-a (unfence) - irig-ū-k-a (become unfenced)
- (d) Ak-a (build) - ak-ūr-a (demolish) - ak-ū-k-a (become demolished)
- (e) Kind-a (plait) - kind-ūr-a (unplait) - kind-ū-k-a (become unplaited)
- (f) Kwam-a (be stuck) - kwam-ūr-a (release) - kwam-ū-ka (become released)
- (g) Kunj-a (fold) - kunj-ūr-a (unfold) - (unfold) - kunj-ū-ka (become unfolded)
- (h) Ar-a (spread e.g. bedding) - ar-ūr-a (make bare) - ar-ū-k-a (become bare)
- (i) Git-a (thatch) - git-ūr-a (unthatch) - gi-ū-k-a (become unthatched)
- (j) Thing-a (plaster) - thing-ūr-a (unplaster) - thing-ū-k-a (become unplastered)

The fact that -k- cannot directly attach to the verb root before the reversative morpheme applies constitutes evidence that -k- only affixes to reversative verbs. e.g. \*hing-k-a, \* tum-k-a (These words are also ruled out phonologically)

Further support for the claim above can be drawn cross-linguistically from Chichewa, a language spoken in some parts of East and Southern Africa. Dubinsky and Simango (1996:754) observe that verbs ending in -ul or -ol alter the phonological realization of the stative morpheme from -ek/ik- to -k-. Examples given include:

- 6(a) gulul (extract/remove) – gulu-k-a  
 (b) zul (uproot) - zu-k-a  
 (c) pasul (tear down) - pasu-k-a

They argue that the derivation of the stative verbs (the ones to the right) involves the deletion of the final consonant of the root and the initial vowel of the stative affix. While we agree with Dubinsky and Simango about the existence of -k- as a stative marker, we reject their line of reasoning concerning the derivation of this morpheme in relation to Gĩkũyũ. Let us translate one of their examples into Gĩkũyũ in order to explain our stand.

- 7(i) Muny-ũr-a (uproot)  
 (ii) Muny-ũr-ĩk-a (become uprootable)  
 (iii) Muny-ũ-k-a (become uprooted)

We find it untenable to argue that in ‘muny-ũ-k-a’ (as contrasted to ‘muny-ur-ik-a’), the ‘r’ and the ‘i’ have been deleted. This is because we find no motivation for the said deletion – it is obviously not phonotactic since ‘muny-ũr-ĩk-a’ has an acceptable syllabic configuration. Besides, and of significance, ‘muny-ũ-k-a’ and ‘muny-ũr-ĩk-a’ are not semantic equivalents as can be seen from the translation. It is therefore more plausible to argue that the stative morpheme in the word ‘muny-ũ-k-a’ is -k- and not -ĩk-. This is underpinned by the fact that all the non-stative verbs above actually carry a reversative meaning<sup>1</sup>, a pre-requisite for the attachment of -k- but not -ĩk- as we have already said.

Above we have made two claims, namely:

- (i) That the stative -k- is restricted to reversative verbs.
- (ii) That -k- is **not** arrived at by deleting the final consonant of the root/stem and the first vowel of -ek/ĩk- and therefore must be seen as an autonomous stative morpheme.

To further validate these claims, we contrast the behaviour of the reversative morpheme with that of the reciprocal one when they are juxtaposed with the stative morphemes. The reciprocal morpheme in Gikuyu is -an- while the reversative is -or-/-ũr- as already established. Examples appear below:

- (8a)(i) Hing-a (close)
- (ii) Hing-ũr-a (open)
- (iii) Hing-ũ-k-a (be open)
- (iv) Hing-ũr-ĩk-a (be possible to open)

<sup>1</sup> It is highly likely that -ol/-ul is the reversative morpheme in Chichewa given that in Gikũyũ it is -or/-ur-. If

- (8b)(i) Rut-a (teach)
- (ii) Rut-an-a (teach one another or others)
- (iii) \*Rut-a-k-a
- (iv) Rut-an-ik-a (be possible to teach)

If the deletion account argued for by Dubinsky and Simango (1996) is accurate, then we would expect '\*rut-a-k-a' to be as well-formed as 'hing-ũ-ka' is, since the final consonant of the stem and the first vowel of the stative affix have been deleted in both (in the former word, the final consonant of the stem is that of the reversative affix while in the latter, it is that of the reciprocal affix). This is not the case however. The ill-formedness of the '\*rut-a-k-a' can be explained in terms of semantics. Note that the verb 'ruta' - (teach), unlike 'hinga' - (close), does not allow for a reversal of the action denoted (hence can not host the reversative affix) and therefore can only take the less restricted -ik- stative.

Having established the existence of two stative morphemes which assume different morphological shapes in Gĩkũyũ, we now examine other differences between them.

### 6.3 DIFFERENCES BETWEEN -k- AND -ek/ik-

There are both syntactic and semantic differences between the two stative morphemes. Starting with the syntactic ones, we have already argued that -k- is restricted to verbs denoting a reversible event or state. Such verbs therefore must bear the reversative affix. On

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this is the case, it is not surprising that in Chichewa, -k- only attaches to words ending in 'l' where such words

the other hand, -ek/ik- does not require this reversibility condition and therefore attaches to verbs with or without the reversative meaning e.g.

9(a) Irig-ūr-ik-a (can be unfenced)

(b) Ri-ik-a (can be eaten/edible)

While 9(a) above bears the reversative morpheme, 9(b) doesn't yet they are both acceptable. On the other hand, only 9(a) can accommodate -k- (irig-ū-k-a).

An interesting question to ask at this point is why the observed affinity between the reversative morpheme and the -k- stative exists. Our proposal is that the two work in tandem to describe the process and the 'product'. That is, the reversative morpheme describes the process that changes an entity from one state into another e.g. from being closed to being open or from being connected to being disconnected. After this reversative process is complete, the -k- stative is then applied to describe the end state of the entity. This suggests that -k- as a morpheme cannot be affixed before the reversative process begins or is completed thus explaining why non-reversative verbs do not accept this morpheme. On the contrary, -ek/ik- can apply to both reversative and non-reversative verbs since it typically describes a potential state rather than an actual one as is the case with -k-.

Another syntactic difference is that *-k-* is only compatible with transitive verbs. This follows from the fact that the reversative morpheme only attaches to transitive verbs. Conversely, *ek/ik* occurs with both transitive and intransitive verbs.<sup>2</sup>

(10a) Njũgũna nĩathingũra nyũmba

Njũgũna nĩ-a-a-thing-ũr-a nyũmba

Njũgũna foc-sub-tns-plaster-rev-fv house

Njũgũna has unplastered the house

(10b) Nyũmba nĩyathingũka

Nyũmba nĩ-ĩ-a-thing-ũ-k-a

House foc-sub-tns-plaster-rev-stat-fv

The house has become unplastered)

(10c) Nyũmba nĩyathingũrika

Nyũmba nĩ-ĩ-a-thing-ũr-ĩk-a

House foc-sub-tns-plaster-rev-stat-fv

The house has been possible to un plaster

(11a) Njũgũna nĩathiĩ

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<sup>2</sup> This contradicts Mchombo (1993) and Dubinsky and Simango (1996) who claim that the stative can only be hosted by transitive verbs.

Njũgũna nĩ-a-a-thiĩ-∅

Njũgũna foc-sub-tns-go-fv

Njũgũna has gone

(11b) \*Nĩgwathika

Nĩ-kũ-a-thi-k-a

Foc-expl-tns-go-stat-fv

(11c) Nigwathiika

Nĩ-kũ-a-thi-ĩk-a

Foc-expl-tns-go-stat-fv

There/it has been possible to go

In (10c) and (11c), we see *-ek/ĩk-* occurring with a transitive and intransitive verb respectively. However *-k-* is only possible with the transitive (10b) but not the intransitive (11b).

Perhaps it could be argued that in 11(c), the morphemic breakdown of the verb should be ‘*thiĩ-k-a*’, in which case the stative morpheme present would be *-k-*, rather than the analysis we have opted for where the stative morpheme is *-ĩk-*. We feel with good reason that such an analysis would be wrong given the following examples in which the verb ‘*thiĩ*’-(go) is placed in different paradigms.

- 12(a) Thi-o (be gone) (passive affix with the meaning that people have gone to a place)
- (b) Thi-ithi-a (causative affix with the meaning of self-causation or simulation)
- (c) Thi-ang-a (diffusive affix with the meaning of ,‘go a little further’)
- (d) Thi-an-i-a (reciprocal-causative affixes with the meaning of, ‘go together with /accompany’)

In all the above examples, we clearly see that the final vowel of the verb ‘**thiĩ**’-(go) has been deleted before the addition of the other verbal extensions. It should therefore follow that in ‘**thi-ĩk-a**’- (be possible to go), the final vowel of the root verb is equally missing and the stative morpheme affixed is -ĩk- and not -k-. Besides, this deletion is in line with what generally happens in Bantu when verbs take extensions. The extension in question interrupts the verb root/stem and the final vowel<sup>3</sup>. It is worth noting that if the deletion fails to take place, ill-formedness results e.g. \*thiĩ-o, \*thiĩ-ithi-a, \*thiĩ-ang-a, \*thiĩ-an-i-a (the clustering of vowels is not the issue here since the language allows it elsewhere e.g. thii-i (you (plural) go)).

Another syntactic difference between the two stative affixes is that only -ek/ĩk- can be used to stativize ditransitive verbs .

- (13a) Guka nĩahee cūcū mbakī  
Guka nĩ-a-a-hee-∅ cūcū mbakī

Grandfather foc-sub-tns-give- fv grandmother snuff

Grandfather has given grandmother snuff

(13b) Cũcũ nĩaheeka mbakĩ

Cũcũ nĩ-a-a-he-ek-a mbakĩ

Grandmother foc-sub-tns-give-fv snuff

Grandmother has been possible to give snuff/ it has

been possible to give grandmother snuff

(13c) \* Cũcũ nĩaheka mbakĩ

Cũcũ nĩ-a-a-he-k-a mbakĩ

Grandmother foc-sub-tns-give-stat-fv snuff

13(b), which is affixed with *-ek-* is well-formed but 13(c), which contains ‘*-k-*’ is not. Other verbs that could be used similarly include: *im-a* (deny), *rut-a* (teach), *teach*, *tum-a* (send) etc.

We also note that while *-k-* can co-occur with the passive morpheme in a few verbs, *ek/ĩk-* can not. Consider:

(14a) Mama nĩarĩo nĩ njohi

Mama nĩ-a-a-rĩ-o nĩ njohi

Uncle foc-sub-intoxicate-pas by beer

<sup>3</sup> Only in this case the final vowel is not interrupted but deleted owing to the idiosyncractic nature of the verbs

Uncle has become intoxicated with beer

(14b) Mama nīariūkwo

Mama nī-a-a-rī-ũ-k-w-o

Uncle foc-sub-tns-intoxicate-rev-stat-pas-fv

Uncle has sobered up

(14c) \*Mama nīariũkwo

Mama nī-a-a-rī-ũr-ĩk-w-o

Uncle foc-sub-tns-intoxicate-rev-stat-pas-fv

Another example is:

15(i) Ug-a (say)

(ii) Ug-ũ-k-w-o (eat one's words)

(iii) \*Ug-ũr-ĩk-w-o

We now look at the semantics of the two stative morphemes. As we reported in 6.1, Matsinhe (1994) claims that a stative verb denotes a spontaneously occurring event. In Gikūyū, we observe that this meaning is only true of -k- stative<sup>3</sup>. Compare 16(a) with 16(b).

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(does not end in the basic 'a' associated with Bantu verbs)

(16a) Mũcibi nĩwohoka

Mũcibi nĩ-ũ-a-oh-o-k-a

Belt foc-sub-tns-tie-rev-stat-fv

The belt has become undone/untied

(16b) Mũcibi nĩwohoreka

Mũcibi nĩ-ũ-a-oh-or-ek-a

Belt foc-sub-tns-tie-rev-stat-fv

The belt has been possible to untie.

It is only in 16(a) that we can read an uninduced occurrence of the event (that of becoming undone). The belt became undone by itself or naturally. This interpretation is not accommodated in 16(b) and we shall shortly see why. The *-ek/ĩk-* stative morpheme on the other hand carries the meaning of ‘be able to be ‘verbed’ or having the potential to be ‘verbed’. 16(b) therefore, means that the belt can be untied or that it is possible to untie the belt. The modality of ability immediately suggests the presence of an agent that performs what is indicated by the verb.

At this point, we would like to address a significant claim made by Dubinsky and Simango (1996: 762) that, “...there are two morphemes *-ĩk*, one with a stative meaning, which combines with verb stems to form derived verbs, and one with a potential meaning which combines with verb stems to form derived adjectives”.

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They arrive at this conclusion on the basis of the following Chichewa examples.

(17a) Nyemba zi-na-phik-ika

beans AGR-PAST-cook-ik

‘The beans were cooked’

(17b) Nyemba zi-na-li zo-phik-ika

beans AGR-PAST-be AGR-cook-ik

‘The beans were cookable’

If we bought their argument and applied it to Gikūyū, we would come up, not with two statives but three:

(i) One that derives verbs and carries a stative meaning e.g.

(18a) Gĩtĩ nĩkĩaunĩka

Gĩtĩ nĩ-kĩ-a-un-ĩk-a

Seat foc-sub-tns-break-stat-fv

The seat has broken (on its own)

(ii) An adjective-deriving one with an adjectival meaning e.g.

(18b) Gĩtĩ nĩkĩunĩku

Gĩtĩ nĩ-kĩ-un-ĩk-u

Seat foc-sub-break-stat-Adj aff.

The seat is broken

- (iii) One that derives adjectival passives and carries both a verbal and an adjectival meaning e.g.

(18c) Gĩtĩ nokiuĩke

Gĩtĩ no-ki-un-ĩk-e

Seat can-sub-break-stat-Adj pas.

The seat can break/is breakable

Let us first observe that unlike in Chichewa, each change in meaning is attended by a change in the final vowel. Since the stative meaning runs through all the examples, we assert that any change in meaning is occasioned by the change of the final vowel and not a difference in the stative morpheme used. The final vowel ‘-a’ therefore indicates that the subject has undergone a process that results in a certain state. The final vowel ‘-u’ simply indicates a certain state while ‘-e’ in conjunction with ‘no’-(can) indicates the potential of the subject to enter a certain state after undergoing a process<sup>4</sup>.

Concomitant with the issue of meaning is that of the agent in a stative construction. All the studies reviewed above are unanimous in their claim that a stative verb is necessarily

<sup>4</sup> See Mwangi (1999) and Gathenji (1981).

agent-deleting<sup>5</sup>. In regard to Gikũyũ, this claim is only partially true. It fully holds with the –k- stative but only sometimes with the –ek/ĩk- morpheme e.g.

(19a) Mũrango nĩwahingũka \*<sup>6</sup> nĩ Mwangi

Mũrango nĩ-u-a-hing-u-k-a \* nĩ Mwangi

Door foc-sub-tns-close-rev-stat-fv \* by Mwangi

The door has opened/has become opened\* by Mwangi

Further, let us note that such constructions do not accept instruments because instruments are used by agents to effect certain actions. Hence the ill-formedness of (19b).

(19b) \*Mũrango nĩwahingũka \* na cabi

Mũrango nĩ-ũ-a-hing-ũ-k-a \* na cabi

Door foc-sub-tns-close-rev-stat-fv \* with key

The door has opened with a key.

That the event (opening) is naturally or spontaneously occurring and therefore dispensing with the need for an agent can be reinforced by the use of ‘all by itself’ at the end of the stative construction e.g.

<sup>5</sup> This is said to be the primary difference between passives (in which the agent is optionally present) and statives (in which agents are obligatorily absent).

<sup>6</sup> The asterisk (\*) is used in this position to indicate that the ill-formedness in the sentence is caused by the structure appearing after it (\*).

(19c) Mūrango nīwahingūka wī wiki

Mūrango nī-ū-a-hing-ū-k-a wī wiki

Door foc-sub-tns-close-rev-stat-fv by itself

The door has opened by itself/on its own.

With the –ek/īk- stative however, matters are trickier. In a positive indicative sentence, an agent is disallowed and the meaning expressed is ‘able to be ‘verbed’- (total ‘doability’).

To illustrate, we contrast 20(a) with 20(b).

(20a) Mūgūnda ūyū nīwarīmīka

Mūgūnda ūyū nī-ū-a-rīm-īk-a

Garden this foc-sub-tns-till-stat-fv

This garden has been possible to till.

(20b) Mūgūnda ūyū ndūngīrīmīka (nī mūdū ūtarī hinya)

Mūgūnda ūyū nt-ū<sup>7</sup>-ngī-rīm-īk-a (nī mūdū ūtarī hinya)

Mūgūnda ūyū neg-sub-tns-till-stat-fv (by person without strength)

This garden is not possible to till (by a person who is not strong).

In 20(a), total ‘tillability’ of the garden is expressed. In the negative counterpart in 20(b)

however, the introduction of the optional agentive ‘by’ phrase qualifies the ‘untillability’ of

the garden; it is only untillable to the weak but not to the strong. This 'untillability' can therefore be said to be partial (note that when 20(b) is truncated, total 'untillability' is expressed). This interpretation makes the use of an agent grammatically and semantically legitimate.

Further proof of this is the admissibility of an instrument as in the following example.

- (20c) Mũgũnda ũyũ ndũngĩrĩmĩka (na icembe)  
 Mũgũnda ũyũ nt-ũ-ngĩ-rĩm-ĩk-a (na icembe)  
 Garden this neg-sub-tns-till-stat-fv (with hoe)  
 This garden is not possible to till (with a hoe)

As earlier asserted, such an instrument implies an agent (whether it is overtly present or not).

Another stative construction that optionally takes an agent and an instrument is one where the derived verb ends in '-e' e.g.

- (20d) Mũgũnda ũyũ noũrĩmĩke (nĩ mũndũ wĩna hinya)  
 Mũgũnda ũyũ no-ũ-rĩm-ĩk-e (nĩ-mũndũ wĩna hinya)  
 Garden this can-sub-till-stat-fv (by a person with strength)  
 This garden can be tilled (by a strong person).

- (20e) Mũgũnda ũyũ noũrĩmĩke (na icembe)

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<sup>7</sup> The base position of the subject marker is immediately before the negator (ũ-ti-ngĩ-rĩm-ĩk-a). Metathesis

Mūgūnda ūyū no-ū-rīm-īk-e (na icembe)

Garden this can-sub-till-stat-fv (with hoe)

This garden can be tilled (with a hoe)

Without the agent, 20(d) implies that anybody can till the garden. The insertion of an agent introduces a qualification – that only a strong person can do so. In 20(e), an optional instrument is introduced.

With the above examples, we hope we have debunked the popular claim that the stative, cross-linguistically, can not take an agent. Matsinhe (1994) attempts to explain this on the basis that an object undergoes the event ‘by itself’. We have shown that this largely applies to the –k- stative but not to –ek/ik-. For example, while a door can open on its own, a garden can not till itself in real life. The occurrence of an agent can therefore not be ruled out on the grounds of spontaneity in the latter case. Also, his explanation falls short of accounting for stativized intransitive verbs such as 11(c) in which there is no object to undergo the event <sup>8</sup>.

We now briefly turn to similarities between the two stative morphemes. The first obvious one is that they both indicate the state or condition of the subject element in a stative

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involving the subject marker and the negator then occurs, hence (20b) above. The ‘n-’ is an orthographical requirement of the language that involves stops.

<sup>7</sup> He regards the expletive element in subject position as a locative object but we note that such an object is not capable of undergoing any event or state).

<sup>8</sup> These terms are borrowed from Comrie (1977) in his description of the passive and are here extended to the stative construction.

construction. The second is that they both allow personal and impersonal statives<sup>9</sup>. The -k-variant forms both personal and impersonal statives of transitive verbs as shown below.

(21a) Rūhuho nĩrwagitũra nyũmba

Rūhuho nĩ-rũ-a-git-ũr-a nyũmba

Wind foc-sub-tns-thatch-rev-fv house

The wind has unthatched the house

(21b) Nyũmba nĩyagitũka

Nyũmba nĩ-ĩ-a-git-ũ-k-a

House foc-sub-tns-thatched

The house has become unthatched

(21c) Nikwagitũka (nyũmba)

Nĩ-kũ-a-git-ũ-k-a (nyũmba)

Foc-expl-tns-thatch-rev-stat-fv (house)

There/it has become unthatched (the house)

(21b) is a personal stative while (21c) impersonal.

With the -ek/ík- morpheme, personal and impersonal statives of transitive verbs as well as impersonal statives of intransitive verbs can be constructed. e.g.

(21d) Nyũmba nĩyagitũrĩka

Nyũmba nĩ-ĩ-a-git-ũr-ĩk-a

House foc-sub-tns-thatch-rev-stat-fv

The house has become possible to unthatch

(21e) Nikwagitũrĩka (nyũmba)

Nĩ-kũ-agit-a-ũr-ĩk-a (nyũmba)

Foc-expl-tns-thatch-rev-stat-fv (house)

There/it has been possible to unthatch ( the house)

(22a) Mwarimũ nĩathiĩ

Mwarimũ nĩ-ũ-a-thiĩ-∅

Teacher foc-sub-tns-go-fv

The teacher has gone

(22b) \*Mwarimũ nĩathiĩka

Mwarimũ nĩ-a-a-thi-k-a

Teacher foc-sub-tns-go-stat-fv

The teacher has become goable

(22c) Nĩgwathiĩka

Nĩ-kũ-a-thi-ĩk-a

Foc-expl-tns-go-stat-fv

There/it has been possible to go

In (21d), the verb is transitive and the construction is personal while that in (21e) is impersonal. In 22, the verb is intransitive and therefore only an impersonal stative is possible as in (22c).

Lastly, we look at verbs that do not take the stative affix. Among these are zero-valency (weather) verbs as seen below:

(23a) Nĩkwaura

Nĩ-kũ-a-ur-a

Foc-expl-tns-rain-fv

It has rained

(23b) \*Nĩkwaurĩka

Nĩ-kũ-a-ur-ĩk-a

Foc-expl-tns-rain-stat-fv

There/it has become rainable

(24a) Nĩgwatuka

Nĩ-kũ-a-tuk-a

Foc-expl-tns-be dark-fv

It has become dark

(24b) \*Nigwatukĩka

Nĩ-kũ-a-tuk-ĩk-a

Foc-expl-tns-be-dark-stat-fv

There/it has become 'darkenable'

Others intransitive verbs that do not accept the stative morpheme are those that denote naturally occurring states, e.g. 'kua'-(die), 'mera' (germinate) thuka'-become spoilt), 'hoh-a' (wither), 'butha' (rot), 'heha'-(become cold). e.g.

(25a) Ngui nĩyakua

Ngui nĩ-ĩ-a-ku-a

Dog foc-sub-tns-die-fv

The dog has died

(25b) \*Ngui nĩyakuĩka

Ngui nĩ-ĩ-a-ku-ĩk-a

Dog foc-sub-tns-die-stat-fv

The dog has been 'dieable'

(25c) \*Nígwakuĩka

Nĩ-kũ-a-ku-ĩk-a

Foc-expl-tns-die-stat-fv

There/it has become 'dieable'.

What the two categories of verbs have in common is that the state expressed by the verbs can not be effected or reversed artificially by human beings. For instance, typically you cannot force it to rain nor can you reverse the rain. You also can not force somebody to die or 'undie'.

In this section, we have looked at syntactic and semantic issues related to the stative morpheme. In the next section, we shall attempt to explain the stative construction theoretically. Henceforth, we shall regard the -ek/ik- variant as the basic stative morpheme for two reasons. One, any verb capable of hosting -k- can also take -ek/ik- but the reverse is largely untrue. -ek/ik- is therefore a lot more productive. Two, we saw in 6.1 that -ek/ik- has been identified cross-linguistically as the stative morpheme in Bantu.

#### 6.4 THEORETICAL ANALYSIS OF THE STATIVE CONSTRUCTION IN GIKUYU

As mentioned in the introduction of this chapter (6.0), both the Merger and Incorporation theories are largely quiet on the stative morpheme. They only mention it as a case of a derived intransitive. Baker (1988a) consigns it to the lexicon<sup>10</sup> saying that it is only in that component that it can change the argument structure of a verb without violating both the Theta Criterion and the Projection Principle. In this section, we shall begin by showing that the Gĩkũyũ stative, contrary to popular belief crosslinguistically (see Baker, 1988a; Mchombo, 1993 and Dubinsky and Simango, 1996) is similar to the passive construction in many respects and therefore if the theories handle the passive syntactically, there is no reason why the stative should not be accorded similar analysis. We shall therefore extend the analysis given for the passive construction to the stative one. We shall however, not discuss the mechanics of the theories in detail in this section since that was done in 5.7 and 5.9.

We begin by looking at the similarities between the stative and the passive morphemes in Gĩkũyũ that justify our handling them in the same syntactic component of grammar. Consider the following examples:

(26a) Kairĩtu gatingĩũraga nyoka ĩno.

Kairĩtu ga-ti-ngĩ-ũrag-a nyoka ĩno

Girl sub-neg-tns-kill-fv snake this

A girl can not kill this snake

(26b) Nyoka ĩno ndĩngĩūrągwo (nĩ kairĩtu)

Nyoka ĩno nt-i-ngĩ-ūrąg-w-o- (nĩ kairĩtu)

Snake this neg-sub-tns-kill-pas-fv (by a girls)

This snake is not 'killable' (by a girl)

(26c) Nyoka ĩno ndĩngĩūrągĩka (nĩ kairĩtu)

~~Nyoka ĩno nt-i-ngĩ-ūrąg-w-o- (nĩ kairĩtu)~~

Snake neg-sub-tns-kill-stat-fv (by girl)

This snake is not 'killable' (by a girl).

(26d) Gũtingĩūrągwo nyoka

Kũ-ti-ngĩ-ūrąg-w-o nyoka

Expl-neg-tns-kill-pas-fv-snake

There can not be killed a snake

(26e) Gũtingĩūrągĩka nyoka

Kũ-ti-ngĩ-ūrąg-ĩk-a nyoka

<sup>10</sup> Obviously he does so from the conviction that the stative is very different from the other argument-taking

Expl-neg-tns-kill-stat-fv snake

It is not possible to kill a snake

From the above examples, we wish to record four similarities between passives and statives:

- (i) The passive morpheme in 26(b) and the stative one in 26(c) have reduced the valency of the verb in 26(a) by one. In other words, they have detransitivised the transitive verb in 26(a).
- (ii) In both 26(b) and 26(c) the subject is the syntactic object of 26(a). This means that both morphemes topicalize the object of the underived verb.
- (iii) In both 26(b) and 26(c), the agent appears obliquely.
- (iv) In 26(b) and 26(d) we see a personal and impersonal passive construction respectively while 26(c) and 26(e) are the stative counterparts.

In Bantu, it has been claimed that the stative, unlike the passive, has a very restricted range of co-occurrence with other morphemes (Mchombo, 1993 and Dubinsky and Simango, 1996). For example, the stative is said to be incompatible with the reciprocal morpheme. The Gikũyũ example below runs counter to this claim.

(27a) Mígũnda ndíngĩheanĩka

Mígũnda nt-i-ngĩ-he-an-ĩk-a

‘Shambas’ neg-sub-tns-give-rec-stat-fv

‘Shambas’ are not possible to give out/it is not possible to give ‘shambas’ out

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morphemes such as the passive.

(27b) Mígũnda ndíngĩheanwo

Mígũnda nt-i-ngĩ-he-an-w-o

'Shamba' neg-sub-tns-give-rec-pas-fv

'Shambas' can not be given out.

(27(a) shows that the reciprocal morpheme can co-occur with the stative while 27(b) shows a co-occurrence between the reciprocal morpheme and the passive one.

In this section we have provided some of the syntactic similarities that obtain between stative and passive constructions. We are now set to embark on a syntactic analysis of the stative morpheme within the Merger Theory.

## 6.5 THE GĪKŪYŪ STATIVE IN THE MERGER THEORY (MARANTZ, 1984)

We begin with Marantz's claim that in some languages, the passive morpheme has the features [-log sub] [-transitive]. We shall assume that the stative affix in such languages bears the same features. According to the 'No Vacuous Affixation Principle' (NVAP), a monotransitive verb is expected to carry opposite features; hence [+log sub] [+transitive]. The affixation of the stative morpheme to a monotransitive verb-root gives rise to a derived verb with the features [-log-sub] [-transitive] since the features of the affix take precedence over those of the root by virtue of 'Feature Percolation'. Such a stative verb is not expected to

take a logical subject at the grammatical subject position (SUB) nor a logical object at the grammatical object position (OBJ).

According to Marantz, the logical object must appear at the S-level because it is a direct argument and semantic role bearer. Given that this object can not appear at OBJ position, it has to be relocated to another site. Such a site is readily available at the empty SUB position which has the feature [-log sub].

The above claims would explain personal stative constructions formed from Gikuyu monotransitive verbs. Consider the following examples:

- (28a) Kamau nīatema mītī irī  
 Kamau nī-a-a-tem-a mītī irī  
 Kamau foc-sub-tns-cut-fv trees two  
 Kamau has cut two trees

- (28b) Mītī irī nīyatemeka  
 Mītī irī nī-ī-a-tem-ek-a  
 Trees two foc-sub-tns-cut-stat-fv  
 Two trees have been cuttable/possible to cut

28(a) is underived. In the stativized 28(b), we see the logical object of 28(a) 'mītī irī'-two trees) occupying the grammatical subject position. The grammatical object position is empty

as predicted. This analysis however fails to account for the impersonal stative of 28(a) given below as 28(c).

(28c) Nīgwatemeka mīti irī

Nī-kū-a-tem-ek-a mīti irī

Foc-expl-tns-cut-stat-fv trees two

There has been cuttable two trees/it has been possible to cut two trees

Here, we see the OBJ position occupied by the logical object contrary to the stipulation of the theory (recall that a stative verb is [-tran] and therefore can not take an object at the grammatical object position).

The theory would take care of such an example by altering the features of the affix to [-log sub] and leaving the transitivity feature unspecified. Those of the underived monotransitive verb would remain the same i.e [+log sub] [+tran]. After percolation, the stative verb would be [-log sub] [+tran] – note that the features of the affix only take precedence if they are specified otherwise those of the root pass on to the derived verb. 28(c) is [-log sub] because at SUB we have an expletive and not a logical subject. It is also [+tran] because it has ‘miti iri’- (two trees) as its object.

Although the example is well-explained, it would appear that with monotransitive verbs, Gikūyú needs two different stative affixes – one bearing the features [-log sub] [-tran] used in personal and the other carrying the feature [-log sub] and having unspecified transitivity status used in impersonal statives. Obviously, this is not a unitary account and we

find this disharmony difficult to explain since the same affix is used in both constructions.

We therefore conclude that Marantz's analysis does not make correct predictions for Gikũyũ statives formed from monotransitive verbs.

The Merger Theory also fails to explain stativized ditransitive verbs in Gikũyũ. We exemplify this below:

(29a) Guka nĩagũra matumbĩ ndukainĩ.

Guka nĩ-a-a-gũr-a matumbĩ ndukainĩ

Grandfather foc-sub-tns-buy-fv eggs in the shop.

Grandfather has bought eggs in the shop.<sup>11</sup>

(29b) Matumbĩ nĩ-ma-a-gũr-ĩka ndukainĩ

Matumbĩ nĩ-ma-a-gũr-ĩka ndukainĩ

Eggs foc-sub-tns-gur-ika in the shop

Eggs have been buyable/possible to buy in the shop.

(29c) Ndukainĩ nĩkwagũrĩka matumbĩ

Ndukainĩ nĩ-kũ-a-gũr-ĩk-a matumbĩ

In the shop foc-expl-tns-buy-stat-fv eggs.

In the shop it was possible to buy eggs.

<sup>11</sup> Note that the order of the objects can not be reversed.

- (29d) Nikwagũrĩka matumbĩ ndukainĩ  
 Nĩ-kũ-a-gũr-ĩk-a matumbĩ ndukainĩ  
 Foc-expl-tns-buy-stat-fv eggs in the shop  
 It has been possible to buy eggs in the shop

We see in (29a) that the verb ‘gũra’-(buy) has two objects –‘matumbĩ’ (eggs) which is non-locative and ‘ndukainĩ’- (in the shop) which is locative. In the stativized 29(b), the non-locative or theme object moves to SUB while the locative remains at OBJ. These positions are reversed in 29(c) where the SUB is occupied by the locative and the OBJ by the non-locative. 29(d) has both objects appearing post-verbally and an expletive taking subject position. 29(b), (c) and (d) would be ruled out by the theory on account of OBJ being occupied by logical objects. That these are true objects can be proved by their potential to act as subjects in passive constructions as in the examples below:

- (29e) Matumbĩ nĩmagũrwo ndukainĩ  
 Matumbĩ nĩ-ma-a-gũr-w-o ndukainĩ  
 Eggs foc-sub-tns-buy-pas-fv in the shop  
 Eggs have been bought in the shop

- (29f) Ndukainĩ nĩkwagũrwo matumbĩ  
 Ndukainĩ nĩ-kũ-a-gũr-w-o matumbĩ

In the shop foc-expl-tns-buy-pas-fv eggs

In the shop there has been bought eggs.

Also each object can be positioned adjacent<sup>12</sup> to the derived verb as we see in 29(b) and 29(c).

Perhaps we should state here that using ditransitive verbs with two non-locative objects would also give the theory a similar problem. The only difference is that when such verbs are stativized, only the goal/benefactive object can be preposed. See the examples below:

(30a) Cūcū ndangīima mwana waru

Cūcū nt-a-ngī-im-a mwana waru

Grandmother neg-sub-tns-deny-fv child potatoes

Grandmother can not deny the child potatoes

(30b) Mwana ndangīimīka waru

Mwana nt-a-ngī-im-īk-a waru

Child neg-sub-tns-deny-stat-fv potatoes

The child is not deniable/can not be denied potatoes.

(30c) \*Waru itingīimīka mwana<sup>13</sup>

Waru i-ti-ngī-im-īk-a mwana

<sup>12</sup> Recall that this feature is used in determining objecthood.

<sup>13</sup> However, this can be salvaged if the associative morpheme is inserted between the root and the stative morpheme. The goal/benefactive object is left out because it is taken care of by the associative.

Potatoes sub-neg-tns-deny-stat-fv child

Potatoes can not be denied a child

Our reaction to the foregoing is that the Merger Theory fails to provide a unified analysis of stative constructions formed from transitive verbs in Gikũyũ. explain stativized ditransitive verbs.

We now look at how Matantz's theory would handle the stativization of intransitive verbs. The stative affix would be [-log sub] and unspecified for transitivity. The underived intransitive verb would be [+log sub] [-transitive]. Feature percolation would render the stative verb [-log sub] [-transitive]. This follows from the fact that the [-log sub] feature of the affix will override the positive one of the root verb while the [-transitive] feature of the root will pass on to the stative verb because it has no competitor in the features of the affix. In other words, the resulting stative verb would not be expected to have a logical subject or a logical object. An example in Gikũyũ follows:

(31a) Ageni nĩmakinya

Ageni nĩ-ma-a- kiny-a

Guests foc-sub-tns-arrive-fv

Guests have arrived

(31b) Nĩgwakinyĩka

Nĩ-kũ-a-kiny-ĩk-a

Foc-expl-tns-arrive-stat-fv

There has been arrivable/it has been possible to arrive there.

(31c) \*Ageni nĩmakinyĩka

Ageni nĩ-ma-a-kiny-ĩk-a

Visitors foc-sub-tns-arrive-stat-fv

The visitors have been arrived

(31b) is neatly explained by the above claims since the stativized verb has neither a logical subject at SUB nor a logical object at OBJ. What appears at SUB is an expletive required by a grammatical stipulation that every clause must have a subject at S-level. The ill-formedness of 31(c) results from a logical subject at SUB. With this type of verb therefore, the Merger Theory gives a correct prediction.

So far, we have looked at how various verb types stativize. We now consider those that don't. Basically, they are of two types:

- (i) Zero-valency Weather verbs
- (ii) Intransitive non-motion verbs<sup>14</sup>

According to Marantz (1984), what these two verb types would have in common would be the features [-log sub] [-transitive]. The stative affix would carry at least the feature [-log sub] if we went by the passive analysis. The 'No Vacuous Affixation Principle' dictates that such an

<sup>14</sup> However, note that a few non-motion verbs do stativize e.g. mak-ik-a - be frightenable.

affix can not attach to a verb that also bears similar features. This explains why the two verb types can not form statives. The theory therefore makes correct predictions in regard to these verbs. Examples are given below:

(32a) Nīgwakīa

Nī-kū-a-kī-a

Foc-expl-tns-dawn-fv

It has dawned

(32b) \*Nīgwakīika

Nī-kū-a-kī-ik-a

Foc-expl-tns-dawn-stat-fv

It has been dawnable

(33a) Mahuti nīmahoooha

Mahuti nī-ma-a-hoh-a

Leaves foc-sub-tns-wither-fv

Leaves have weathered.

(33b) \*Nikwahooheka mahuti

Ni-ku-a-hooh-ek-a mahuti

Foc-expl-tns-wither-stat-fv leaves

There has been witherable the leaves

(34a) Mwana n̄iarīra

Mwana n̄i-a-a-r̄ir-a

Child foc-sub-tns-cry-fv

The child has cried

(34b) \*Nikwarīrika mwana

N̄i-kū-a-r̄ir-īk-a mwana

Foc-expl-tns-cry-stat-fv child

There has been cryable child

In 32(a) and (b) we have a weather verb while in 33(a) and (b) we have a verb denoting a natural state (therefore the stative morpheme can not affix to an inherently stative verb). The verb in 34(a) and (b) does not have any peculiar characteristic except being non-motion.

To wind up the analysis of the stative within Merger, we have made the following observations:

- (i) While the theory can explain both personal and impersonal statives formed from monotransitive verbs, the analysis is not convincing since it is not unified.
- (ii) Stativized ditransitive verbs simply defy the analysis.

- (iii) Intransitive verbs, be they stativizable or not are adequately explained and so are the zero-valency verbs.

Our next task is the analysis of the stative construction within the Incorporation Theory of Baker 1988a).

## 6.6: THE INCORPORATION THEORY (BAKER, 1988a) AND THE GĪKŪYŪ STATIVE

The first assumption we shall make here is that the stative morpheme is an argument of the stativized verb just as the passive affix is an argument of the passive verb. Likewise, we shall assume that this affixal stative argument bears the external theta-role in line with Baker's claims concerning the passive affix. To explain the different stative constructions evident in GĪkūyū, abstract case will be invoked as it was in the case of the passive.

We recall from 5.10 that Baker envisages three types of languages:

- (i) Those in which the affixal argument needs case and therefore takes the accusative case.
- (ii) Those in which it only takes case if case is available.
- (iii) Those in which it doesn't need case at all.

If we assume that GĪkūyū is a language in which the stative affix needs the accusative case, we get mixed results with monotransitive base verbs in that personal statives formed from such verbs will be adequately explained while impersonal ones will not (see 5.10 for the passive on this aspect). Consider the examples below:

(35a) Maria nīahūūra nguo

Maria nī-a-a-hūūr-a nguo

Maria foc-sub-tns-wash-fv clothes

Maria has washed clothes

(35b) Nguo nīciāhūūrīka

Nguo nī-ci-a-hūūr-īk-a

Clothes foc-sub-tns-wash-stat-fv

Clothes have been washable/possible to wash

(35c) Nīgūkūhūūrīka nguo?

Nī-kū-kū-hūūr-īk- a nguo?

Foc-expl-tns-wash-stat-fv clothes?

Will clothes be washable/possible to wash?

35(b) is a personal stative construction in which the internal argument of the underived 35(a) has moved to the external argument position. This movement is said to be motivated by the fact that the stative affix takes the accusative case typically associated with the internal argument of a monotransitive verb and so this argument, 'nguo' -(clothes) in our example, is stripped of case and must move to avoid violating the Case Filter (Baker, 1988a). The only

landing site where case is available is the subject position. 'Nguo' – (clothes) thus receives the nominative case assigned by INFL.

The above argument does not hold for 35(c) where the internal argument would appear to be caseless because it fails to move to a position where case can be assigned. If Gikũyũ is a language in which the stative affix needs case, then 35(c) should not be a possible sentence yet it is. This can only mean that Gikũyũ does not belong to this group of languages.

As we noted in the case of the passive (5.4.1), ditransitive verbs in Gikũyũ can not be accommodated within the case-based analysis envisaged by the Incorporation Theory. We stated that the problem of case assignment begins right at the underived sentence where the accusative case goes to the goal (by virtue of proximity to the assigning verb) rather than the theme it is associated with. The theme, which is supposed to be theta-marked structurally and not inherently, is thus left without case. Due to this complication from the onset, we will not venture into a case-based analysis of stative constructions formed from ditransitive verbs. For details on why a case-based analysis of stative constructions formed from ditransitive verbs would fail, see the passive account in section 5.4.1.

Judging from the shortcomings in the analysis of mono and ditransitive verbs cited above, it would appear that the stative affix in Gikũyũ does not need case. This is reinforced by the fact that statives formed from intransitive verbs can not be accommodated within this account since such verbs have no accusative case to assign to the affix. However, intransitive verbs that don't stativize would be accounted for. These include weather verbs and non-motion verbs such as 'kĩa'-(dawn) and 'hooha'-(wither) respectively given in example (32)

and (33) above. The two would be ruled out on the basis of the unavailability of the accusative case which the stative affix needs.

Next we examine whether Gikũyũ fits within the languages whose stative affix takes case if case is available. What this means is that the accusative case borne by an internal argument of a mono or ditransitive verb will be taken up by the stative affix. On the other hand, intransitive verbs are objectless and therefore have no accusative case to assign an object (consequently, the stative affix will not have case either). Case is therefore said to be unavailable for such verbs. For mono and ditransitive verbs, this analysis will not yield anything different from the analysis already given for languages in which the stative affix needs case. However, statives of intransitive verbs given in (36) below can now be accommodated.

(36a) Nĩgwakinya ageni

Nĩ-kũ-a-kiny-a ageni

Foc-expl-tns-arrive-fv visitors

There has arrived visitors

(36b) Ageni nĩmakinya

Ageni nĩ-ma-a-kiny-a

Visitors foc-sub-tns-arrive-fv

Visitors have arrived

(36c) Nĩgwakinyĩka

Nĩ-kũ-a-kiny-ĩk-a

Foc-expl-tns-arrive-stat-fv

There has been arrivable/ it has been possible to arrive there.

36(a) and 36(b) present interesting ‘contrasts’. In 36(a) the verb is seemingly transitive but in 36(b) it is intransitive. Actually the one argument in 36(a) is not an object because in 36(b) it moves to subject position without any derivational motivation entailed in the movement of true objects<sup>15</sup>. Being objectless therefore, the verb has no accusative case to assign to the stative affix. As an argument of the verb the affix needs PF (phonological form) identified for theta-marking purposes. In lieu of case, incorporation becomes an identifier making it possible to form a stative sentence such as 36(c).

We would hasten to add, as we did in the case of the passive, that the affix can only take the internal theta-role since it is the only one available in Gĩkũyũ intransitive verbs (see example 36a). This contradicts Baker’s (1988a) stand that only verbs with an external theta-role can be passivized and by extension therefore, stativized.

We have seen that Gĩkũyũ data presents problems to the two case-based typologies already discussed. We shall therefore look at the third option in which the stative affix is said not to need case at all. In such a scenario, impersonal statives of intransitive and monotransitive verbs will pass (the problem of case assignment to ditransitive verbs notwithstanding) but their personal counterparts will not. Remember that in impersonal

<sup>15</sup> What triggers this movement is a grammatical stipulation that the subject position be filled by either

constructions such as 35(c) the internal arguments remain verb-internal. This can now be justified on the grounds that they retain their case and therefore need not move. The intransitive verbs will be expected to get identification through incorporation. Unfortunately, personal stative constructions are totally left out of the picture. There are sentences such as 35(b) where an internal argument is preposed. Why this should happen when case is not a factor escapes the theory. This account also fails to explain why some intransitive verbs do not stativize.

In closing this section, we have argued that a case-based account does not address the full range of stative constructions available in Gĩkũyũ. None of the three typologies envisaged by the theory seems to reconcile personal and impersonal statives in a unitary account. Our position is that this shortcoming is due to Baker's concept of abstract case rather than a syntactic analysis of the stative. We wish to note that the alternative to case (the Predication Theory combined with the Theta Theory) we have offered for the passive can work in the same way for the stative construction (See section 5.4.2). Since only the examples and not the explanations would be different, we will not go into this alternative in this chapter.

## CHAPTER 7

### 7.0 SUMMARY OF FINDINGS

This study had two main objectives. The first one was to determine whether the applicative, the causative, the passive and the stative morphemes in Gikūyū are inflectional or derivational. Our analysis of Gikūyū data has revealed that, to a very large extent, the criteria used in making the distinction cannot be relied upon to give conclusive results. This is because the four morphemes appear to be inflectional when tested against the criteria of productivity, regularity in, meaning and relevance to syntax. The criterion of placement from the root has given mixed results regarding the applicative but largely shows it to be derivational as it does the remaining three morphemes.

However, we have argued that it is still useful to make the distinction between the two categories of morphemes especially for lexicographical reasons. We have reformulated the distinguishing criteria and observed that there are three features which appear to be characteristic of the four GFC morphemes under investigation. These features are:

- (1) The morphemes typically appear closer to the root when juxtaposed with the aspect morpheme which is considered inflectional.
- (2) They alter the valency structure of a verb by either increasing or reducing the number of arguments such a verb requires in its base form. (The aspect morpheme has no such effect).

- (3) They introduce a substantive change in the meaning of their host verbs. In other words, they derive new words from the base verbs. This is quite unlike the aspect morpheme whose affixation merely changes the form of the base verb.

The above criteria therefore distinguish the four verbal extensions investigated in this study from the aspect morphemes. Whether these criteria would work similarly in other languages is left for further research.

The second objective was to investigate the morpho-syntactic phenomena occasioned by the affixation of the applicative, the causative, the passive and the stative morphemes in Gikūyū. Concerning the applicative construction, we have shown that zero valency verbs take one overt argument after the affixation of the applicative morpheme while the intransitive and monotransitive can take up to four. The ditransitive type is associated with three applied arguments. Worth-noting here is the fact that though the locative is optional in a non-applied construction, it becomes obligatory with the introduction of the applied affix.

An attempt to explain the Gikūyū applicative within the Merger Theory faced several complications. To begin with, the theory is silent on locative arguments and therefore does not have provision for the assignment of a locative semantic role. This leaves a lot of constructions unaccounted for since all verbs have the potential to take a locative argument. We have also seen that some Gikūyū data cannot be explained by the assignment of semantic roles as envisaged by the theory. For example, there are instances when there is one role assignor but more than one applied argument in need of semantic roles. In other cases, there

are two role assignors but only one role assignee. Both these situations contradict the stipulations of the theory.

Significantly, it has emerged that sentences with multiple applied arguments are completely beyond the scope of the theory. We have therefore suggested that the theory needs revision in order to broaden the semantic-role assignment scope of the affix. Such a revision would enable it to assign a role to any and all the arguments that a verb takes.

The Incorporation Theory of Baker (1988a,b) has not fared any better in explaining the Gikūyū applicative. Its claim that the applied argument necessarily receives the structural accusative case shuts out sentences constructed from zero-valency verbs and intransitive verbs since they don't have objects and therefore have no accusative case. Also, his prediction that benefactive applicatives cannot be formed from intransitive verbs has not found support in Gikūyū data. We have concluded that in Gikūyū, any verb whose semantics allows a benefactive/malefactive reading can indeed take such an applied argument.

As in Marantz (1984), locative and motive arguments are uncatered for in Incorporation Theory as are sentences with more than two applied arguments. In the latter case, the problem is that the theory only makes provision for the assignment of two abstract cases (one structural and the other inherent). This leaves two arguments caseless in blatant violation of the Case Frame Preservation Principle. However it has been shown that the theory correctly identifies the argument with the direct object properties in Gikūyū.

The issue of whether Gikūyū has multiple applied affixes has also been looked at. The conclusion has been that regardless of the number of applied arguments in a construction,

only one applied affix is needed. Another major issue discussed is the status of Gikūyū with regard to object symmetry. Our data has shown that Gikūyū is an asymmetrical language.

In relation to the causative construction in Gikūyū, the syntactic and semantic implications of the two causative morphemes, *-i-* and *-ithi-*, are discussed and it emerges that the two morphemes differ in these parameters.

In explaining the causative theoretically, we have stated that the Merger Theory (Marantz, 1984) envisages two types of causatives: (1) The monoclausal (2) The biclausal. Our tests have revealed that a biclausal analysis can be only partly validated by Gikūyū data. For example, as predicted by the theory, the causee does become the direct object and therefore marks verb-object agreement with the verb. It also becomes the subject of the corresponding passive sentence.

However, we have stated that the crucial test relates to the ability of the reflexive to take the causee as its antecedent. We have argued that this does not apply to Gikūyū where the only antecedent relation possible is between the causee and the matrix subject. A monoclausal analysis has been shown to be unsuitable for Gikūyū because it makes all the wrong predictions. For example, the causee is expected to surface as the second (lower) object contrary to the evidence in Gikūyū. In the final analysis, it has been argued that, although the theory makes some correct predictions with regard to Gikūyū data, there is no theory-neutral way of verifying some of its claims.

Concerning the Incorporation Theory (Baker, 1985), we have shown that the Gikūyū causative defies an analysis involving the movement of the entire VP. This is because such a movement places the causee after the lower object thus giving rise to ill-formedness. The

alternative analysis in which only the V moves, is validated by Gikūyū data but once again we have no language-based evidence to show that the said movement actually takes place as postulated by the theory.

The above movements have been shown to be tied to case assignment which, though able to explain the basic causative construction in Gikūyū, cannot be verified outside the theory. This is because the language lacks morphological case. Also, we have seen that embedded ditransitive verbs and double-causative constructions are a challenge to the case-assignment proposal of the theory.

In the discussion of the passive construction, it has been observed that Gikūyū has both the personal and impersonal passives evident in most Bantu languages. Crucially, we have seen that intransitive verbs are capable of passivizing quite unlike those found in some languages such as English (see Marantz, 1984 and Baker, 1988a). Evidently, the only verb category that does not host the passive affix is the zero valency one.

The Merger Theory has been found to be adequate in explaining most passive constructions in Gikūyū, both personal and impersonal. However, ditransitive verbs are not catered for.

Our discussion of Baker (1988a) with regard to the Gikūyū passive construction has revealed the same weaknesses noted in connection with the causative as far as case-assignment is concerned. Using abstract case, Baker groups languages according to the behaviour of the passive affix. He says that there are those in which the passive affix: (1) needs case, (2) takes case only if it is available (3) doesn't need case at all. It has been shown in our study that Gikūyū doesn't fit in any of these types because one or other type of passive

construction is left unexplained. An example is the impersonal passive constructions formed from transitive verbs whereby the internal argument remains post-verbal and therefore caseless contrary to the requirements of the theory. Passives formed from ditransitive verbs are especially excluded from the claims of this theory. Our observation in this regard is that Baker's proposal can only work for languages in which the theme precedes the goal and for those that manifest morphological case. Gikūyū does not fall under either category.

A significant argument made is that though the passive affix in Gikūyū typically takes the external theta role, it can also take an internal one if the former is not available. This is what happens with intransitive verbs. This contradicts Baker's claim that the passive affix necessarily absorbs the external theta role. We have stressed however, that the role taken by this affix must be inherently agentive hence capable of initiating the event or participating in the state named by the verb.

Given the challenges faced by the Incorporation Theory, we have proposed an extension. This alternative analysis makes use of the Theta sub-theory and the Predication sub-theory, both of which are used in the development of the Incorporation Theory. The two sub-theories have been shown to adequately account for the entire range of passive constructions in Gikūyū including those outside the scope of Incorporation Theory.

In connection with the stative construction in Gikūyū, we have established that Gikūyū has two stative morphemes, **-k-** and **-ek/ik-**. We view this as a significant contribution given that in all the previous studies we are aware of, **-ek/ik-** morpheme has been identified and discussed as the sole stative morpheme (see Mchombo, 1993; Matsinhe, 1994 among others). We have established that the two morphemes differ morphologically, syntactically and

semantically. Syntactically, data-based evidence has revealed the following differences between the two:

- (a) **-k-** can only follow reversative verbs. Such verbs are invariably transitive. **-ik/ek-** on the other hand has no such restrictions and can occur with or without the reversative morpheme. It also attaches to both transitive and intransitive verbs.
- (b) **-k-** co-occurs with the passive morpheme in a number of examples. **-ik/ek-** does not allow such a configuration.
- (c) Constructions with **-ik/ek-** can allow an agent and /or an instrumental qualifier but those with **-k-** cannot.
- (d) Semantically, **-k-** denotes a spontaneously occurring event or state while **-ik/ek-** indicates the potential to be 'verbed'.

Concerning theory, we have shown that neither the Merger nor the Incorporation Theory deals with the stative morpheme. However, we have justified our use of these theories to analyse the stative construction by showing that the stative and the passive morphemes are quite similar. Consequently, we have argued that the two can be handled within the same theoretical apparatus. The emergent similarities between the two morphemes are:

- (a) Both are valency-reducing
- (b) Both topicalize the object of the underived verb
- (c) Both have personal and impersonal constructions

(d) The agent can appear obliquely in both

After analysis, our results have confirmed that the patterns evident in passive constructions are also manifested in stative ones.

## 7.1 CONCLUSION AND RECOMMENDATIONS

At the beginning of this study, we asked whether there are morphology-specific aspects of GFC processes in Gikūyū that defy syntactic analysis. The answer to this pertinent question can only be in the affirmative given that both the Merger Theory (Marantz, 1984) and the Incorporation Theory (Baker, 1988a,b) have left many constructions unexplained. As we have seen, the worst affected constructions are those made from intransitive and ditransitive verbs.

This shortcoming basically stems from the fact that the theories hinge on syntactic positions and the movement of arguments. The movement is typically regulated by abstract case. This has resulted in some erroneous predictions for Gikūyū such as the claim that an internal argument cannot remain post-verbal in a passive sentence. Concerning the applicative construction, it has emerged that the theories are incapable of accurately predicting the number of applied arguments that a given verb can take and the attendant thematic roles of such arguments.

What these failings point to is the fact that not all morphological phenomena lend themselves to syntactic analysis. This suggests that morphology should retain its distinct identity as a process that accounts for word-structure. This is especially true where

concatenation of morphemes is concerned. That the causative, for example, applies before the passive (see section 4.3.2), is purely morphologically determined. In section 5.4.2, we have seen that for the theme argument to be subjectivized in a passive sentence, an associative morpheme must be introduced between the root and the passive morpheme if morphological well-formedness is to be achieved. This is a requirement outside syntax and goes to show that morphological principles of well-formedness are different from syntactic ones thus making a case for morphology as a component of study.

There are also many other issues that defy syntactic explanations. These include:

- (1) The consequence of affixation. Take for instance verbal extensions in Gikūyū. While some extensions such as the passive and the causative will change the sub-category of a verb by reducing or increasing its valency respectively, others such as the reversative have no such effect.
- (2) Choice of affix, where more than one alternative exists. In section 4.2.2, we have seen that the choice between the *-i-* and *-ithi-* causative morphemes is determined by the meaning one wants to convey, and also to some extent the phonological structure of the root verb e.g. while 'ku-ithi-a' (pretend to die) is acceptable, \* 'ku-i-a' is disallowed on account of vowel clustering. Phonological conditioning is responsible for the choice between the applicative *-er/ir-* in section 3.1 and the stative *-ek/ik-* in section 6.2. In the latter section, we have argued that the choice between the *-k-* and *-ek/ik-* statives is determined by the morphology and the semantics of the stem (such that *-k-* only attaches to reversative verbs while *-ek/ik-* has no such restriction).

(3) Number of affixes present. Here, reference is not to the co-occurrence of affixes but rather the duplication of a given morpheme within the verb. In section 3.1.4, we have mentioned that while some languages such as Kikamba (Kioko, 1994) allow more than one applied affix, others like Gikũyũ exhibit only one regardless of the number of applied arguments introduced. We have also shown in section 4.4.1 that there are marked cases in which a double causative affix is used (-ithi-ithi-) in Gikũyũ. Which language will behave how in respect to the number of affixes would therefore appear to be a morphological language-internal matter.

From the foregoing, our thesis is that morphology is central to the study of language since it deals with the basic building blocks- morphemes both bound and free. It is these morphemes that then feed the other components of language such as syntax, phonology and semantics. All the components relate intricately to form the complex that language is.

Further research is however called for in order to attain a fuller understanding of this vexed issue of the place of morphology in language. A pertinent question to ask at this point is whether considering the lexical nature of words and their function (hence a lexical-functional approach) would provide answers where syntax has fallen short in Gikũyũ and other Bantu languages. Recently, several researches have been done in this direction, notably Alsina and Mchombo (1989), Matsinhe (1994) and Dubinsky and Simango (1996) among others. For now, the humble submission of this study is that in the description of language, morphology still has a niche and its place is not seriously threatened by syntax or any other component. In our search for theoretical explanatory tools, we must look beyond syntax for an



**APPENDIX A (SMALL SAMPLE)**

**Dynamic Transitive Verb-roots**

Verb-Root	Gloss	Causative	Passive	Applicative	Stative
end-	sell	endithia	endio	enderia	endeka
hurunj-	scatter/spread	hurunjithia	hurunjwo	hurunjīra	hurunjika
thondek-	make	thondekithia	thondekwo	thondekera	thondekeka
noor-	sharpen	noorithia	noorwo	noorera	nooreka
tu-	pick	tuithia	tuo	tuīra/tuīra	tuika
tūm-	send	tūmithia	tūmwo	tūmīra	tūmika
in-	swing,sway	inia	inwo	inīra	inika
tar-	count	tarithia	tarwo	tarīra	raika
teith-	assist	teithithia	teithio	teithīra	teithika
rūm-	bite	rūmia,rūmithia	rūmwo	rūmīra	rūmika
nyit-	catch	nyithia	nyitwo	nyitīra	nyitika
rug-	cook	rugithia	rugwo	rugīra	rugika
ak-	build	akithia	akwo	akīra	akika
kūnj-	fold	kūnjithia	kūnjwo	kūnjīra	kūnjika
atūr-	split	atūrithia	atūrwo	atūrīra	atūrīka
hand-	plant	handithia	handwo	handīra	handika
kama	milk	kamithia	kamwo	kamīra	kamika
tem-	cut	temithia	temwo	temera	temeka
ciar-	give birth	ciarithia	ciarwo	ciarīra	ciarika
thim-	gera	gerithia	gerwo	gerera	gereka
gūr-	buy	gūrithia	gūrwo	gūrīra	gūrīka
hihiny-	press	hihinyithia	hihinywo	hihinyīra	hihinyika
andīk-	write	andīkithia	andīkwo	andīkīra	andīkika
ūrag-	kill,break	ūragithia	ūragwo	ūragīra	ūragika
reg-	refuse	regithia	regwo	regera	regeka

**Stative Transitive Verb-roots**

Verb-root	Gloss	Causative	Passive	Applicative	stative
igu-	hear	iguithia	iguo	iguīra	iguika
hīti-	miss	hītithia	hītio	hītīra	hītika
ririkan-	remember	ririkania,rikanithia	ririkanwo	ririkanīra	ririkanika

gĩ-	get,have	gĩithia	gĩo	giira	giika
men-	hate	menithia	menwo	menera	meneka
hok-	trust	?	hokwo	hokera	hokeka
tĩ-	respect	tĩithia	tĩo	tĩira	tĩika
meny-	know	menyithia	menywo	menyera	menyeka

**Stative Intransitive Verb-roots**

Verb-root	Gloss	Causative	Passive	Applicative	stative
thek-	laugh	thekia,thekithia	thekwo	thekera	thekeka
kĩr-	surpass	kĩria,kĩrithia	kĩrwo	kĩrĩra	kĩrĩka
gũrũk-	run mad	gũrũkia,gũrũkithia	gũrũkwo	gũrũkĩra	gũrũkĩka
imb-	swell	imbia,imbithia	imbwo	imbĩra	imbĩka
hũũt-	be hungry	hũũtia,hũũtithia	hũũtwo	hũũtĩra	hũũtĩka
horer-	become calm/humble	horeria,horerithia	horerwo	horerera	horereka
heh-	become cold	hehia,hehithia	?	hehera	heheka
hoh-	shrivel	hohia,hohithia	?	hohera	hoheka
thay-	become lazy	thayia	?	thairĩra	?
rũar-	be sick	rũaria,rũarithia	rũarwo	rũarĩra	?
ther-	be clean	theria,therithia	therwo	therera	thereka
ken-	be happy	kenia,kenithia	kenwo	kenera	keneka
thir-	get finished	thiria,thirithia	thirwo	thirĩra	thirĩka
riũk-	resurrect	riũkia	riũkwo	riũkĩra	riũkĩka
rakar-	get annoyed	rakaria,rakarithia	rakarwo	rakarira	rakarika
hũm-	pant	hũmia,hũmithia	hũmwo	hũmĩra	hũmĩka
ku-	die	kuithia	kuo	kuĩra	?
mak-	get frightened/worried	makia,makithia	makwo	makĩra	makĩka
cũng-	doze	cũngia,cũngithia	cũngwo	cũngĩra	?
tong-	become rich	tongia	tongwo	tongera	tongeka
hat-	be esnared	hatia,hatithia	hatwo	hatĩra	hatĩka
geg-	get amazed	gegia,gegithia	gegwo	gegera	?
buth-	rot	buthia	?	buthĩra	?
thũk-	become spoilt	thũkia,thũkithia	?	thũkĩra	thũkĩka
har-	be broke	haria,harithia	harwo	harĩra	harĩka
nog-	become tired	nogia,nogithia	nogwo	nogera	nogeka

**Dynamic Intransitive Verb-roots**

Verb-root	Gloss	Causative	Passive	Applicative	Stative
negen-	make noise	negenia,negenithia	negenwo	negerera	negeneka
tet-	complain	tetia,tetithia	tetwo	tetera	teteka
inam-	bend	inamia,inamithia	inamwo	inamĩra	inamĩka
thi-	go	thithia	thio	thiĩra	thiĩka
eher-	move away	eheria,eherithia	eherwo	eherera	ehereka
kiny-	arrive	kinyia,kinyithia	kinywo	kinyĩra	kinyĩka
kom-	lie down	komia,komithia	komwo	komera	komeka

## Transitive/Intransitive Verb-roots

Verb-root	Gloss	Causative	Passive	Applicative	Stative
cam-	taste	camia, camithia	camwo	camīra	camīka
ūr-	lose/get lost	?	ūrwo	ūrīra	?
un-	break/burst	unithia	unwo	unīra	unīka
haic-	climb/rise	haicia, haicithia	haicwo	haicīra	haicīka
mer-	grow	meria, merithia	merwo	merera	?
tum-	seal	tumia, tumithia	tumwo	tumīra	tumīka

## APPENDIX B (LARGE SAMPLE)

VERB	GLOSS	CATEGORY	SUB-CATEGORY
endia	sell	transitive	dynamic
cooka	return	intransitive	dynamic
menya	know	transitive	stative
teta	complain	intransitive	dynamic
ciara	deliver	transitive	dynamic
tema	cut	transitive	dynamic
hurunja	scatter	transitive	dynamic
koma	sleep	intransitive	stative
una	break/burst	transitive/intransitive	dynamic/stative
ruta	take away/ teach	transitive	dynamic
tūra	pierce	transitive	dynamic
gera	measure	transitive	dynamic
gūra	buy	transitive	dynamic
ona	see	transitive	stative
thondeka	make	transitive	dynamic
thutha	smash	transitive	dynamic
te	throw	transitive	dynamic
ika	doubt	transitive	stative
tabarīra	plan	transitive	dynamic
negena	make noise	intransitive	dynamic
thīna	be poor	intransitive	stative
uga	say	transitive	dynamic
kumia	praise,adore	transitive	dynamic
hūūra	beat/wash	transitive	dynamic
oha	jail/tie	transitive	dynamic
tūma	send	transitive	dynamic
gīa	get, have	transitive	stative
gera	pass	intransitive	dynamic
geria	try	transitive	dynamic
oya	take	transitive	dynamic
hihinya	press	transitive	dynamic
anīrīra	shout	intransitive	dynamic
he	give	transitive	dynamic
ingīha	increase	intransitive	stative
thuura	choose	transitive	dynamic
ūka	come	intransitive	dynamic
aga	miss	transitive	stative
ikara	stay	intransitive	dynamic
andīka	write	transitive	dynamic
riga	be unknown	intransitive	stative
rora	look	transitive	dynamic
tiga	stop/leave	transitive	dynamic
ūraga	kill	transitive	dynamic
hoota	defeat	transitive	dynamic
gaatha	tighen/praise	transitive	dynamic
hītia	err	intransitive	dynamic
rega	refuse	transitive	dynamic
hera	confess, be remorseful	transitive	dynamic

VERB	GLOSS	CATEGORY	SUB-CATEGORY
taara	advise	transitive	dynamic
aria	speak	intransitive	dynamic
kinyīra	reach	transitive	dyn/stat
therema	flourish	intransitive	stative
haragana	be scattered	intransitive	stative
cokera	repeat	transitive	dynamic
caria	search	transitive	dynamic
tereta	talk	intransitive	dynamic
hunja	spread	intransitive	stative
thomboca	mix	transitive	dynamic
tara	count	transitive	dynamic
ongerera	add	transitive	dynamic
teithia	help	transitive	dynamic
rūma	bite	transitive	dynamic
riūka	resurrect	intransitive	stative
nyiita	catch	transitive	dynamic
tuga	host, welcome	transitive	dynamic
ruga	cook	transitive	dynamic
kima	mash	transitive	dynamic
gita	thatch	transitive	dynamic
thinga	block/plaster	transitive	dynamic
aka	build	transitive	dynamic
kūnja	fold	transitive	dynamic
atūra	split	transitive	dynamic
tuma	sew	transitive	dynamic
ratha	shoot/prophesy	transitive	dynamic
ratha	rise (of the sun)	intransitive	stative
haata	sweep	transitive	dynamic
anīka	spread	transitive	dynamic
mena	hate	transitive	stative
rakara	be angry	intransitive	stative
cūūnga	be sleepy	intransitive	stative
kena	be happy	intransitive	stative
togota	fester	intransitive	stative
nyiha	become small	intransitive	stative
neneha	become big	intransitive	stative
thika	bury	transitive	dynamic
rigita	treat the sick	transitive	dynamic
getha	harvest	transitive	dynamic
rīma	weed/farm	transitive	dynamic
haanda	plant	transitive	dynamic
riita	become foolish	intransitive	stative
kīa	dawn, stop raining	argumentless	stative
mūrīka	illuminate	transitive	dynamic/stative
ringa	hit	transitive	dynamic
hiūha	become hot	intransitive	stative
hiūha	hurry	intransitive	dynamic
rīka	end/be finished	intransitive	stative
nina	finish	transitive	dynamic

VERB	GLOSS	CATEGORY	SUB-CATEGORY
reehe	bring	transitive	dynamic
nyiita	catch	transitive	dynamic
rīa	eat	transitive	dynamic
nyua	drink	transitive	dynamic
kua	die	intransitive	stative
gweeta	name/mention	transitive	dynamic
harīria	prepare	transitive	dynamic
rigithatha	sire a firstborn	transitive	dynamic
ririkana	remember	transitive	stative
tura	make	transitive	dynamic
tuura	ache	intransitive	stative
huuha	blow	transitive	dynamic
hooya	pray, beg	transitive	dynamic
ina	sing	transitive	dynamic
haica	climb/rise	transitive/intransitive	dynamic/stative
maka	be frightened/worried	intransitive	stative
īta	call	transitive	dynamic
tonga	become rich	intransitive	stative
iya	steal	transitive	dynamic
thiī	go	intransitive	dynamic
tua	decide, determine	transitive	dynamic
giria	prevent, wipe	transitive	dynamic
ciira	case	intransitive	dynamic
twaara	take	transitive	dynamic
tigara	remain	intransitive	stative
rūmīrīra	follow	transitive	dynamic
kinya	step on	transitive	dynamic
kinyaa	arrive	intransitive	dynamic
kiinya	brush teeth	transitive	dynamic
hūthīra	use	transitive	dynamic
thira	end/get finished	intransitive	stative
gega	get amazed	intransitive	stative
hītūka	enter	intransitive	dynamic
hūtha	be light or simple	intransitive	stative
Tīkīra	accept	transitive	dynamic
theema	avoid	transitive	dynamic
hitha	hide	transitive	dynamic
henia	cheat	transitive	dynamic
eheria	move away	intransitive	dynamic
hata	become ensnared	intransitive	stative
ceha	prune	transitive	dynamic
tua	pick	transitive	dynamic
ceera	visit	intransitive	dynamic
orota	point	transitive	dynamic
hinga	close	transitive	dynamic
tūika	be	intransitive	stative
kīra	surpass	transitive	stative
rathima	bless	transitive	dynamic
ruma	abuse, curse	transitive	dynamic

VERB	GLOSS	CATEGORY	SUB-CATEGORY
thĩnja	slaughter	transitive	dynamic
thiora	twist	transitive	dynamic
ũkĩra	arise	intransitive	dynamic
cina	burn	transitive	dynamic
hiha	wring	transitive	dynamic
hĩa	become cooked	intransitive	stative
therũka	come to boil	intransitive	stative
kira	keep quiet	intransitive	dynamic
ũmba	land	intransitive	dynamic
ũmba	create	transitive	dynamic
tũkia	take after	transitive	stative
cuuka	slander, report	transitive	dynamic
camba	become disgraced	intransitive	stative
teng'era	run	intransitive	dynamic
hũma	pant	intransitive	stative
ira	demean, underate	transitive	dynamic
ira	become black	intransitive	stative
ira	become dark (weather)	argumentless	stative
thakara	become beautiful	intransitive	stative
cong'iha	become ugly	intransitive	stative
hũũta	become hungry	intransitive	stative
hũhia	tease	transitive	dynamic
hũna	become full	intransitive	stative
ihũra	fill	intransitive	stative
ita	pour/leak	transitive	dynamic/stative
thaama	shift	intransitive	dynamic
tũgĩra	become elevated/esteemed	intransitive	stative
cura	become charred	intransitive	stative
gema	become smart/adorned	intransitive	stative
tharia	demolish	transitive	dynamic
cunga	sift, sieve	transitive	dynamic
mendera	crush	transitive	dynamic
rera	rear	transitive	dynamic
rera	float	intransitive	stative
therera	flow	intransitive	stative
rangĩra	guard	transitive	dynamic
horera	become calm/humble	intransitive	stative
gũrũka	run mad	intransitive	stative
tũgũta	slash	transitive	dynamic
hara	scratch	transitive	dynamic
hara	become broke	intransitive	stative
kunya	pinch	transitive	dynamic
humba	cover, cloth	transitive	dynamic
gimara	become of age	intransitive	stative
cimana	become dark	argumentless	stative
thera	become clean	intransitive	stative
gia	disturb	transitive	dynamic
thirĩka	become irritated	intransitive	stative
munya	uproot	transitive	dynamic

VERB	GLOSS	CATEGORY	SUB-CATEGORY
noga	become tired	intransitive	stative
heha	become cold	intransitive	stative
imba	swell	intransitive	stative
hoha	wither	intransitive	stative
thīa	grind/mill	transitive	dynamic
rinda	soak	transitive	dynamic
ura	rain	argumentless	stative
ara	shine	argumentless	stative
araa	make a bed	transitive	dynamic
baara	examine, scrutinize	transitive	dynamic
enja	shave, dig	transitive	dynamic
ambata	ascend	intransitive	dynamic
ikūrūka	descend	intransitive	dynamic
amba	crucify, hoist	transitive	dynamic
goromoka	growl	intransitive	dynamic
kūga	bark	intransitive	dynamic
bogotha	talk deliriously	intransitive	dynamic
tondoira	stammer	intransitive	dynamic
tūgūga	stagger	intransitive	dynamic
thigina	sweat	intransitive	stative
moya	massage	transitive	dynamic
thaya	become lazy	intransitive	stative
ingata	chase away	transitive	dynamic
ītīka	respond	intransitive	dynamic
thigana	spy	intransitive	dynamic
gucia	pull	transitive	dynamic
conora	ashame	transitive	dynamic
hīmbīria	embrace	transitive	dynamic
hona	get well	intransitive	stative
rwaara	be sick	intransitive	stative
thiūrūrūka	feel dizzy	intransitive	stative
thiūrūrūka	surround	transitive	dynamic
hoka	trust	transitive	stative
honoka	become saved	intransitive	stative
butha	rot	intransitive	stative
inama	bend	intransitive	dynamic
rūgama	stand	intransitive	dynamic
gacīra	be cozy/comfortable	intransitive	stative
goca	praise	transitive	dynamic
nyarira	disturb/waste	transitive	dynamic
ūra	lose/get lost, run away	transitive/intransitive	dynamic/stative
thugunda	plan, moot	transitive	dynamic
nyoroka	become smooth	intransitive	stative
mera	grow	transitive/intransitive	dynamic/stative
tuka	become dark	argumentless	stative
erūha	become light-skinned/white	intransitive	stative
tinia	cut	transitive	dynamic
tunya	snatch	transitive	dynamic
thegetha	drill	transitive	dynamic

VERB	GLOSS	CATEGORY	SUB-CATEGORY
kuruma	crawl	intransitive	dynamic
ñā	intoxicate	transitive	stative
thuka	shake something	transitive	dynamic
thaitha	persuade	transitive	dynamic
enyūra	cut a piece	transitive	dynamic
cama	taste	transitive/intransitive	dynamic/stative
kaya	cry in pain	intransitive	dynamic
thūka	become spoilt/bad	intransitive	stative
agīra	become good	intransitive	stative
menyerera	take care(of)	transitive	dynamic
ongerera	add	transitive	dynamic
īhia	sin	intransitive	dynamic
roga	bewitch	transitive	dynamic
rara	become luke warm	intransitive	stative
nunga	smell	intransitive	stative
kūma	chide	transitive	dynamic
tīya	respect	transitive	stative
thua	limp	intransitive	dynamic
kama	milk	transitive	dynamic
onga	suckle	transitive	dynamic
gwata	catch/hold	transitive	dynamic
tanuka	chew	transitive	dynamic
hehenja	crush	transitive	dynamic
thaya	wrap	transitive	dynamic
gaya	divide	transitive	dynamic
kerūra	drain	transitive	dynamic
maramara	become decadent	intransitive	stative
hwa	dry up/diminish	intransitive	stative
hiūka	shrink	intransitive	stative
kunda	sip	transitive	dynamic
tua	name after	transitive	dynamic
tweka	become dilute	intransitive	stative
tūka	go bad/congeal	intransitive	stative
kera	chop	transitive	dynamic
ota	bask or warm oneself	transitive	dynamic
atha	command/rule	transitive	dynamic
cogotha	affront/accost	transitive	dynamic
īka	do	transitive	dynamic
thoma	read	transitive	dynamic
ūria	ask	transitive	dynamic
thikīria	listen	transitive	dynamic
geithia	greet	transitive	dynamic
theka	laugh	intransitive	dynamic
hīnja	become thin	intransitive	stative
nora	become fat	intransitive	stative
ima	deny	transitive	dynamic
raara	spend the night	intransitive	dynamic
kūra	grow	intransitive	stative
igua	hear	transitive	stative

VERB	GLOSS	CATEGORY	SUB-CATEGORY
rīra	cry	intransitive	dynamic
noora	sharpen	transitive	dynamic
tuma	seal	transitive/intransitive	dynamic/stative

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